Joint Logistics Component Commander and the Mobility Air Forces:

GRADUATE RESEARCH PROJECT

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This paper is dedicated to the Young Tigers—those KC-135 tanker crews that have flown from the shores of Okinawa into harm's way—and to all KC-135 crewmembers that do whatever they can wherever it is necessary to bring the might of U.S. airpower to bear in support of our friends and against our enemies.

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Abstract

Though joint operations have been the hallmark of U.S. military doctrine for many years, a systematic study of joint logistics and the role of the U.S. Air Force has not been undertaken. This neglect has allowed a significant question to remain unanswered, specifically, "Would the theater Commander-in-Chief (CINC) benefit from a codified, doctrinally supported theater logistics commander?" Moreover, no study has looked at this question from the unique perspective of the mobility air forces (MAF), and their role in joint theater leadership. This study grappled with the question of joint theater logistics command and control, especially from the MAF point of view. It looked at whether there can be a logistics component, if it could bring any benefit to the CINC, and finally, how the mobility air forces would be effected.

A logistics component can exist: U.S. law allows a logistics component and doctrine supports its creation as an option for the CINC. OPERATIONS DESERT STORM, RESTORE HOPE and JOINT ENDEAVOR show that the U.S. has successfully used a theater logistics organization and that the concept works. These same examples also show how an ad hoc organization has serious shortfalls in the support it can provide. Current leadership is pursuing theater logistics implementation as shown by joint vision statements and the logistics plans of the various CINCs.

A logistics component can bring benefits to the CINC. The JFLOGCC controls the logistics process from the theater and prevents any confusion about the requirements and priorities of the CINC. The JFLOGCC also takes Service logistics and melds it into

theater logistics to apportion support just as combat forces are apportioned. Lastly, with the backdrop of limited transportation and finite supplies, the JFLOGCC makes the decision as to who gets support and who doesn't, according to the CINC's plan. The JFLOGCC can maximize a theater's limited logistics and therefore, maximize the theater's combat power.

Finally, the official Air Force stance on JTLM was explored showing that the Air Force is concerned about letting another agency handle logistics; but a logistics component may potentially benefit the Services. Moreover, the redefined mobility air forces, with a designated commander gaining control of APODs as well as other Service mobility air forces would greatly compliment the logistics component and be a major portion of it. In short, this paper proposes that the current Director of Mobility Forces be made the Commander, Mobility Air Forces, and a new position, the Air Mobility Division (AMD) Director take over the operation of the AMD in the Air Operations Center (AOC). The mobility air forces should become a part of the logistics component, executed with all other air forces via the AOC, and apportioned as necessary to combat operations.

JOINT LOGISTICS COMPONENT COMMANDER AND THE MOBILITY AIR FORCES

I. Introduction

Though joint operations have been the hallmark of U.S. military doctrine for many years, a systematic study of joint logistics and the role of the U.S. Air Force has not been undertaken. This neglect has allowed a significant question to remain unanswered, specifically, "Would the theater Commander-in-Chief (CINC) benefit from a codified, doctrinally supported theater logistics commander?" Moreover, no study has looked at this question from the unique perspective of the mobility air forces (MAF), and their role in joint theater leadership. This study will grapple with the question of joint theater logistics command and control, especially from the MAF point of view.

Background

For well over 20 years, the U.S. military has had as its goal to fight as a unified team. Codified into U.S. law by the Goldwater-Nichols Act of 1986, under Title 10, new and innovative ideas about jointness were instituted with the purpose of increasing military might. Goldwater-Nichols aimed to improve the flexibility in the use of the forces given to the unified commanders to prosecute armed conflict. With the overarching goal of all conflicts being victory, the U.S. must realize this goal with the least cost in human life and other national resources. The political leadership of this country, with Title 10, has told the military that a fundamental way to do this is through the joint efforts of all of the Services involved—we must operate as a joint team.

Logistics has been seen since antiquity as a fundamental part of military operations and key to victory. Alexander the Great planned his Asian campaigns around his concepts of logistics. His ability to coordinate land and sea sources of logistical support and to plan his campaigns to take advantage of local logistical realities enabled him to move with the speed and flexibility that proved fundamental to victory (Engels, 1978:57-59, 119). Modern leadership also acknowledges the reality of logistics. Joint Publications repeatedly underscore its importance, and raise it to an equal status of other aspects of warfighting—Dominant Maneuver, Precision Engagement, and Full Dimensional Protection (JV 2020, 2000:24). But beyond current doctrinal guidance, some experiments have occurred with theater logistics. A good example of this is in OPERATION DESERT STORM. There, the CINC decided the best way to handle logistics for the conflict was through a single commander. He consequently assigned to Major General William Pagonis the role of joint theater logistics commander, and had him promoted to Lieutenant General (Pagonis, 1992: 97-98, 144). Though General Pagonis' organization, title and chain of command were completely Army, having to report through the Army Component Commander (ARCENT), his commission during the war was a joint commission. He helped decide which S/APODs were chosen and was in charge of theater transportation (Pagonis, 1992: 69-70).

The fact the Army was picked to steward logistics for the theater effort in the Gulf War is not surprising given its recent logistical history. The Army is typically the largest component in terms of manpower and the dominant user of logistics. It also is the dominant Service in terms of Wartime Executive Agent Responsibilities (WEAR) (FM 100-17-3, 1999: C-1). In short, the Army typically garners responsibility for bulk fuel,

mortuary affairs and line-haul transportation, etc., because they have the inherent capabilities to perform those functions where other Services aren't sourced to do that. This status has led the Army to create several echelons of organizations with the sole purpose of providing logistical support. Furthermore, it has transformed its echelon above corps unit, the old Theater Army Area Command (TAACOM) into the Theater Support Command (TSC). The TSC is designed to coordinate and control all Army logistical needs within the theater. Lower echelon units, like the Corps Support Command and the Division Support Command are responsible for the corps and division level logistics, respectively (Pagonis, 1992:119). The Army has thought about logistics, both for its forces and the other Services, at the theater level for some time and in-depth. General Schwarzkopf was quick to take advantage of that and to use the established hierarchy to run logistics for his theater.

The Army, due to its role as dominant user, is fundamentally aware of logistics and is leading the effort for theater-level focus. Because of their expeditionary nature, the other Services also have much at stake concerning logistics and they are beginning to consider a joint role to theater logistics. Gone are the days of forces in garrison at the hot spots, prepositioned to meet the enemy. The military of the early twenty-first century must move its personnel and equipment from the continental United States (CONUS) to anywhere in the world, meet and defeat the enemy, all the while maintaining an uninterrupted line of supply back to the homeland. This is logistics at its best, and it is an asymmetric advantage that only the United States possesses, must retain, and use as efficiently as possible. For just as it is an advantage, it is also one of America's centers

of gravity and therefore a vulnerability. If the U.S. cripples its logistics because of ineffective use, the U.S. is doing part of the enemy's job for him.

Problem Statement

The Services agree that logistics are important and take their Title 10 responsibilities seriously. But there is lack of agreement in the application of logistics at the joint, theater level. Fundamentally, should there be a commander for theater logistics on the level of the other component commanders, like the Joint Forces Air Component Commander (JFACC)? This problem stems from several conflicts within US law, Service interpretation of that law, and Service parochialism with the need to defend resources and capabilities in a competitive environment.

Conflict exists within the United States' law. U.S. Code Title 10 outlines the responsibilities of the various Services and those of the combatant commanders. Title 10 stipulates the Services have the responsibility to supply and equip their forces, both of which are logistical functions (Title 10, 2000: sec 303; sec 503; sec 803). Title 10 also stipulates that the combatant commander has directive authority over logistics (Title 10, 2000:sec 6). Which takes precedence? Moreover, conflict exists between the Services in the interpretation of this directive. Some hold staunchly to the necessity of the Service to provide all logistical functions, while others hold that the Service's role is subject to the demands of the conflict and is subordinate to the U.S. commander in that conflict. Further conflict exists over the potential command organization: what should the command look like, who and what command relationships should exist to support it, and who provides the commander, and in the era of reduced staffs, who provides his staff and their training?

Finally, this problem has not been looked at from the U.S. Air Force point of view. Logistics is a core competency of the Air Force. It is expressly named rapid global mobility, but the other core Air Force competencies of global attack, precision engagement and air and space superiority are tied to and dependent upon logistics (AFDD1, 1997: 29-36). Not only is the Air Force dependent upon its organic logistics, but so are the other Services. The reality of today's CONUS based forces conducting warfare as an expeditionary force demands rapid mobility, and that means airlift for the first crucial days of conflict. U.S. strategic plans call for strategic airlift to be the sole provider until PREPO ships and then the fast sealift ships arrive. To that end, the Air Force's role as both a provider and leader must be considered when addressing the problem of joint theater logistics.

The potential benefit to the CINC and the conduct of his campaign is great whenever logistics effectiveness is increased, especially since logistics first enables combat power, then sustains it. Therefore, the command and organization of theater logistics and the role of the MAF must be studied.

Research Objectives/Questions

This study will provide answers to the research question, "would a theater-level, joint logistics component commander benefit a CINC's campaign?" This study will accomplish this by answering the following investigative and secondary investigative questions:

1. Can there be a theater logistics component?
    a. Does U.S. law allow it?
    b. Does current doctrine support the concept?
    c. Does current leadership support the concept?
    d. Does history support the concept?
    e. Do the CINCs plan to use the concept today?

f. What form could the organization take?

2. Should there be a theater logistics commander and component? Could it…
   a. Support the Principles of War?
   b. Raise the level of logistics' importance?
   c. Aid in prioritization?
   d. Solve contracting problems like outbidding ourselves?
   e. Provide TPFDD visibility and discipline?
   f. Establish priorities at S/APOD and possibly at S/APOE?

   g. Bring benefits stemming from total logistics theater visibility?
   h. Bring efficiencies when repositioning theater PREPO?
   i. Bring efficiencies at the S/APODs?
   j. Reduce redundancy?

3. What problems may result from a logistics component?

4. How could the mobility air forces contribute to the logistics component?
   a. How could the command relations of the MAF change?
   b. How could the command relations of the Army and maritime logisticians change?

Research Focus

This study was scoped to consider the logistics of the U.S. Army, Air Force, Marine Corps, and the Navy at the theater level and how they interact with each other at that level. This paper did not address Service-specific logistics or practices. Furthermore, this study confined itself to qualitative analysis of doctrine and commander's intent. In-depth analysis gained from intensive wargaming and exercises was beyond the scope of this paper. Finally, the ramifications of new command roles were looked at only from the Air Force point of view.

Methodology

This study used a qualitative approach to arrive at its conclusions. It shows first that the concept of a logistics component is legal then it shows how the concept would be beneficial to the CINC and the execution of his mission. The basis for determining if

there could be a logistics component commander rested on an examination of U.S. law and doctrine, as well as a review of logistics lessons learned from contingencies in Saudi Arabia, Somalia, and in Croatia. Senior leadership vision pertaining to theater logistics was determined from Joint Vision 2010 and 2020 documents, and interviews of the unified commands' J-4 staffs to determined how each was planning to handle joint theater logistics. These interviews followed the script located in appendix A. The goal of the interview was to determine the geographical CINC's intent about how they would implement theater logistics. In an effort to keep from influencing the subject, a script was used, but respondents were allowed to comment freely and follow tangent subjects as they saw fit.

The method for determining the benefits and disadvantages of a logistics component commander stemmed from a review of the literature. Senior Service School and Intermediate Service School papers provided insight into the pros and cons of theater logistics.

This methodology was used to provide the reader with a grounding in law, doctrine, current commanders' intent, as well as to provide some ideas about how to assemble a theater logistics organization and how the MAF may fit into those plans.

Nomenclature

This paper will use the terms Commander-in-Chief (CINC) and Joint Task Force Commander interchangeably. The intent is to look at theater logistics during a conflict where there is only one JTF operating in the theater.

Preview of Remaining Chapters

Chapter II answers the first investigative question, “can there be a theater logistics commander?”

Chapter III answers the second and third investigative questions: “should there be a theater logistics commander?” And, “What problems may result from a logistics component?”

Chapter IV answers the third investigative question, “how could the MAF forces contribute to a theater logistics component?”

Chapter V is the conclusion and presents suggestions for future research.

II. *Can* there be a Logistics Component?

The armed forces must be organized to effectively accomplish the state's political goals. If a nation must turn to its military, that military must be capable of fulfilling its mission efficiently. If the U.S. military adopted a theater logistics organization, by centralizing logistics under a component commander, would such a path be warranted? First, it must be decided if it is legal. If it is legal, we must determine if doctrine, leadership, and history support the concept. If not, the idea of a logistics component is moot. This chapter will look at U.S. law, military doctrine, current leadership views, some lessons of history and then consider how a logistics component might be organized.

U.S. Law

Title 10 of the United States Code outlines the authority and responsibilities of the armed forces. Chapters 303, 503 and 803 deal with the Services and give them the authority, among others, of organizing, supplying, equipping, servicing, and maintaining their forces. Chapter 6, section 164, "Commanders of combatant commands: assignment powers and duties," details the authority of the CINC. Specifically, law provides that the combat commander has the necessary authority to carry out missions. He has the command functions that include:

> " (A) giving authoritative direction to subordinate commands and forces necessary to carry out missions assigned to the command, including authoritative direction over all aspects of military operations, joint training, and logistics;
> (B) prescribing the chain of command to the commands and forces within the command;
> (C) organizing commands and forces within that command as he considers necessary to carry out missions assigned to the command;
> (D) employing forces within that command as he considers necessary to carry out missions assigned to the command;
> (E) assigning command functions to subordinate commanders;

> (F) coordinating and approving those aspects of administration and support (including control of resources and equipment, internal organization, and training) and discipline necessary to carry out missions assigned to the command; and
> (G) exercising the authority with respect to selecting subordinate commanders…" (Title 10, 2001:sec 164)

U.S. law therefore gives logistical responsibility to both the Services and the combatant commander. This can be a cause of tension in the relationship between the two, but if the Service concentrates on being able to provide what is necessary and the CINC concentrates on his priority and employment, the two can work in concert. Problems may arise when a Service tries to dictate priorities to the commander based on doctrine or parochial concerns. The Services need to subordinate themselves to the needs of the commander. Law does not restrict the existence of a theater logistics component commander.

Doctrine

"The nature of modern warfare demands that we fight as a team…commanders choose the capabilities they need from the air, land, sea… Effectively integrated joint forces expose no weak points or seam to enemy action, while they…find and attack enemy weak points. Joint warfare is essential to victory" (JP-1, 1995: i). America will fight as a team. The question is, "how integrated a team?" Joint logistics occupies a large portion of that question. To find an answer, the first stop is joint doctrine. The leadership of the U.S. military codifies its ideas about how America conducts warfare in doctrine. Determining how doctrine approaches joint logistics is, therefore, crucial.

Joint Publication 1 as an overarching document directs that the U.S. will fight as a team and will take advantage of the synergies brought to bear by a combined effort of the various Services.

Joint Publication 3-0 delves deeper into detail, and provides an understanding of the inherit authority of command. Specifically, a commander with combatant command (COCOM) has the authority to organize and employ his forces. He has the authority to take the apportioned forces and mold them as necessary to meet the threat that confronts him. Moreover, COCOM allows for directive authority for logistics (JP 3-0, 1995: II-7), a power that stems from Title 10. With this authority, a combatant commander can direct his subordinate commanders to ensure effective execution of operations plans, economy of operations, and to prevent duplication of functions or facilities. This appears to be carte blanche authority to design his forces however the commander wants, but doctrine goes on to point out that commanders should allow the various Services to maintain their organizational integrity while meeting his needs (JP 3-0, 1995: II-10). Furthermore, commanders may centralize functions, but doctrine warns that the flexibility and innovation of the subordinate forces need to be maintained.

JP 3-0 continues to offer flexibility to the commander in how he designs his forces. Logistics is a Service-specific function and should be executed by the Services, but the relationship between the Service component commanders is determined by the CINC enabling one service to logistically support another (II-14). Another example of flexibility is how commanders may organize their forces along functional lines where similar capabilities and functions are exploited by a single command (II-14). A good example of this is the Joint Forces Air Component Commander, where a single commander commands forces from across service boundaries. Finally, JP 3-0 points out that command involves prioritizing and allocating resources (II-16).

The final doctrinal publication we will look at is JP 4-0, Doctrine for Logistic Support of Joint Operations. JP 4-0 expands the logistical themes expressed in higher doctrine publications, and offers several recommendations to the commander on how to establish a joint theater logistics system. The directive authority for logistics of the commander is normally exercised through subordinate joint force commanders and Service component commanders. This authority does not relieve the Services of their responsibility to support their own forces—the CINC is responsible for logistics within the theater, the Services beyond it (JP 4-0, 2000: I-4).

JP 4-0 goes on to say, "unity of command is essential to coordinate national and theater logistical operations. Logistics is a function of command. This principal is met through he CINC's directive authority for logistics…to direct logistics actions and resources necessary [to fulfill the mission]" (JP 4-0, 2000: II-5). Logistical coordination should exist among the functions of all effected commands to avoid confusion, congestion and unnecessary duplication—thus ensuring unity of effort (JP 4-0, 2000: IV-4). This unity of effort harmonizes logistical activities with combat employment and is "best obtained under a single commander" (JP 4-0, 2000: II-6). Finally, JP 4-0 introduces a concept called Joint Theater Logistics Management (JTLM) that can fulfill this unity of effort. JTLM may fuse multiple logistics functions, and can be formed in a multitude of ways: around a service organization, an expanded J-4 staff, a predominant Service, delegated to a subordinate JTF command, an expanded logistics readiness center, or a stand alone logistics agency (JP 4-0, 2000: B-2). In short, not only does JP 4-0 allow the CINC to form a theater logistics organization, it gives options on how to do it. JP 4-0

does not dictate this, but allows it and maybe encourages it. It also does not specifically discuss logistics as a component.

Joint theater logistics takes place at the operational level of war with ramifications at the tactical and strategic levels. Logistics must be robust, for without it, the tactics of the platoon would prove moot, the campaign would falter, and the strategic aims of the state would not be accomplished. Doctrine does not command the U.S. armed forces to institute a theater level logistics organization to fight its wars. It even emphasizes that Services are responsible for their units' logistics and those units should maintain their organic organization to operate the way they were designed to operate. At the outset, it appears that doctrine answers the first question in the negative—there shouldn't be a theater logistics commander. True, but it does not forbid it either. Joint doctrine makes it very clear that the commander has the authority to organize his forces as is necessary to win. He can allow Services to take care of their own logistics, support other Services, or organize an umbrella component to provide logistical support to the theater. Joint doctrine doesn't dictate a method, it allows for flexibility. Just as Title 10 subordinates the Services to the commander by his directive authority for logistics, doctrine subordinates itself to the commander. Doctrine allows a theater component commander.

Does current leadership support the concept?

American military leadership voices their opinions in several ways; this section will look at the Joint Vision 2010 and 2020 (JTV 2010/2020) papers as well as describe the opinions of senior leaders as expressed in several interviews. The Joint Vision series is an attempt by the Joint Chiefs of Staff to describe the concepts that will guide American warfighting in the near future. JTV 2010 describes logistics as one of four legs

that enables the U.S. to dominate the battlefield. This simple statement elevates logistics to equal footing among dominant maneuver—the ability to apply overwhelming force anywhere in the world, precision engagement—the ability to strike exactly with the desired effect, and full-dimensional protection—complete control of all aspects of the battlespace to allow our forces to function fully (JTV 2010, 20-22).

The logistics part of the equation, "focused logistics," entails an understanding that the other three legs depend solely upon successful logistics. It also describes a robust logistics capability that allows rapid response to deploy and to support combat. This support should come from tailored logistics packages that are not the "rigid vertical organizations of the past" (JTV 2010: 24)—something designed specifically to support combat.

JTV 2020 was written to build upon JTV 2010 and molds the four legs into one concept, that of "full spectrum dominance." The point is to build a force that is fully joint in organization and doctrine. In terms of logistics, this entails "innovative organizational structures" that allow for complete management of the entire logistics system, including in-transit visibility, real-time control of the supply pipeline and increased effectiveness (JTV 2020: 24-25).

In the curriculum of the Advanced Studies of Air Mobility, the students get to meet and carry on conversations with senior leaders. These discussions are strictly non-attribution, but the gist of the conversations is germane to this research. Basically, these leaders can be placed into two broad groups, those that worry about capabilities and those that do not want to be at the mercy of other Services. The leaders that worry about effect or capability are not afraid to subordinate their Service to others if that is what the theater

requires. On the other hand, some leaders are very reluctant to subordinate their Service. Parochialism is a powerful force, and not completely mislaid. The Services, with their responsibility given by law to train, organize and equip have to compete for funding and other resources among themselves. An offshoot of this competition is a determination to go it alone. If a Service can accomplish the mission without help, or be the Service that enables others, they have demonstrated their usefulness and have gained power in Congress for funding. This may be the reason for a general lack of trust. The basic fear is that a commander will take care of his own first and give priority to his Service's needs over other Services. In short, senior leaders either are not concerned about losing status in the eyes of the Congress, or they are unwilling to take the risk in front of Congress, and do not support the idea of some other Service making decisions about another's logistics.

The Joint Vision documents and the candid opinions of senior leaders leave the door open for innovation. JTV 2010 and 2020 encourage looking beyond old ways of thinking and stovepipe mentality, but the reality of competing priorities in and out of a theater, as well as personalities must be considered in any joint organization.

Does history support the concept?

The history of warfare is full of examples of good logistics being the key to victory in the battlefield. Combat power is tied to and enabled by logistics (JP 4-0, 2000: I-1), and able commanders have always sought to improve on their resources. This section will look to ancient history and Alexander the Great to briefly look at how he handled joint logistics. This section will then turn to recent history and look to several examples of how commanders organized their joint logistics: war with Iraq

(OPERATION DESERT SHIELD/STORM), military operations in Somalia (OPERATION RESTORE HOPE), and NATO operations in the former republic of Yugoslavia (OPERATION JOINT ENDEAVOR).

Alexander the Great based his campaigns around logistics. With a keen understanding of the limits of an army carrying its own supplies—like mule trains eating much of what it carried, Alexander himself coordinated sustainment for his army. Primarily he used the navy to carry the supplies. Moreover, he was adept at keeping his logistics lean thereby enabling speed, mobility and lightning strikes which in turn enabled him to be unpredictable to the enemy and provided the basis of his success (Engels, 1978: 119-121). In short, Alexander demonstrated the importance of unity of command in arranging logistical concerns and the importance of logistical planning.

DESERT SHIELD and DESERT STORM.

Just as ancient history showed the importance of unity of command and logistical planning, recent examples show the application of these same lessons. In OPERATION DESERT SHIELD and STORM, the CINC, Gen Schwarzkopf, set up his theater logistics under a single commander, Lt Gen Pagonis. Almost at the beginning of the planning for the deployment of forces, the CINC and the commander for Army forces in Central Command (ARCENT) agreed to establish a joint logistics commander. His title was Deputy Commanding General for Logistics (DCM LOG), and was embedded in the Army component's chain of command working directly for ARCENT. In this capacity, the DCM LOG was responsible for common items to all of the Services including all classes of supply except for repair parts. In addition, Gen Pagonis served as Commander,

ARCENT SUPCOM, responsible for purely Army logistics. He was also the Host-Nation Coordinator, overseeing host-nation contracts (Pagonis, 1992: 97-98). General Pagonis, as the chief logistician in the theater sums up the effect of his command as a success. He said, "during the entire conflict, not a single mission was cancelled, postponed, curtailed or even delayed for lack of logistical support" (Pagonis, 1992: 150). The monumental accomplishment of moving over 500,000 soldiers, their equipment, and sustaining them in a wartime environment can be considered a true success.

On the other hand, General Pagonis never goes into detail on how he brought efficiencies to the conflict, especially in dealing with other Services. In fact, the logistics part of the war had some troubles. As the deployment began in August, 100% of all lift was by air. In week two, it dropped to 50% as the PREPO ships began to arrive, and in week three, airlift provided 15% of all lift once the fast sealift ships began to arrive. Moreover, 99% of all passengers arrived via airlift during Phase I of the deployment (7 Aug – 8 Nov). The CINC wanted all initial deployment to be in the Damman-Dhahran area, along the expected axis of Iraqi attack. Therefore, most of the arriving airlift came into Dhahran. The airport quickly became overburdened and the Air Force needed to open other APODs. The Army was reluctant to allow this primarily because the Army had little transportation and wanted the APOD to be as close to the front line as possible. Adding to the problems, Dhahran could not "turn" the aircraft quickly due to delays waiting for fuel to get from storage to the aircraft. This lack of ground transportation and fuel availability further impacted the strategic situation in the early days. Not until the end of September, did the theater possess enough transportation to begin to move the supplies piling up at the docks and airfields. (Menarchik, 1993: 72-74)

Another problem faced during the early stages of the conflict was a general lack of logistics structure in place to receive units and their equipment. Amazingly, four people constituted the total theater logistics function for the first few days. To compensate, Lt General Pagonis was forced to steal manpower from incoming units and train them to work as logisticians only to return them to their units when newly arrived soldiers were pressed into service, repeating the cycle. Combat power was diminished by the necessity of reception. (Pagonis, 1992: 89) There was also suboptimized shipping. 28,000 out of 41,000 containers had to be opened on the docks to discover what was in them. The drive to optimize shipping by maximizing each container, often with multiple units' equipment inside coupled with badly documented manifests and incorrectly entered bar codes resulted in unknown contents. Many of these containers were trucked thousands of miles into the desert only to find that only a fraction of what was moved was needed by the front-line units; the majority of the contents belonged to units near the ports. (Pagonis, 1992: 99, 206) Strategic transportation had to plug into a chaotic, ill-formed reception system in theater, because there was no logistics structure in place to receive the units. (Menarchik, 1993: 46). Finally, TPFDD discipline also suffered. After the 1st Tactical Fighter Wing and the 82d Airborne's Ready Brigade started deploying, the CINC expected the TPFDD to be ran. What CENTCOM failed to predict was the impact of the way the units requested transportation. In peacetime, units call TRANSCOM directly requesting lift. This is exactly what happened early in the Gulf conflict. Every unit called requesting lift, flooding the system and inundating staff officers as they tried to sort out lift priorities. There was a loss of focus as the ad hoc TPFDD was followed. The various units could not go at once, and the deploying

community "lacked the discipline, joint training, and authority to coordinate the sequencing" (Menarchik, 1993: 60). CENTCOM's control of the deployment was tenuous at best, and an ad hoc validation process began where the TRANSCOM called CENTCOM J-3 and J-4 daily with the next day's lift capabilities. J-3 would apportion airlift among the Services, and J-4 would apportion the sealift (Menarchik, 1993:61). Theater logistics did improve over the course of the campaign, as support began to arrive in sufficient numbers.

General Pagonis' experiences demonstrated the tribulations that a logistics commander must go through. Not only did he inherent a logistics and deployment system that was virtually out of control, he lacked the authority to influence the priorities coming into theater (Pagonis, 1992: 90). He was also making it up as he went since he did not have doctrine to fall back on. A large part of the deployment was hurriedly planned the night the President decided to offer military aid to Saudi Arabia. Not only were the logistical requests for host-nation support of the initial deployment made up in urgent, ad hoc planning just after the invasion, so were the decisions about which S/APODS would be used. In an airplane trip from Fort McPherson to McDill AFB, General Pagonis and several ARCENT logistics officers picked the S/APODs. At this time Pagonis had not been officially named the theater logistician, nor does there appear to be any coordination with the Air Force or the Navy regarding suitability for operations at the chosen ports. Similarly, his quest for sustainment was purely an Army concern (Pagonis, 1992: 69-71). This points to another problem he had to contend with. Because he reported directly to ARCENT he often had to make priority calls between the Services. Lt Gen Pagonis had split loyalties since he was responsible for both the theater

in general and the Army in particular. He had the responsibility to decide how to best supply the Services and he had to do that from within the Army chain of command (Pagonis, 1992: 97). Conflict can be seen in the Air Force's requests to open up more APODs to allow for increased throughput from strategic airlift. The were denied since the Army wanted them close to the front lines—Army needs overrode Air Force needs, primarily because sufficient ground transport was not in theater. Lack of logistic support in the form of heavy trucks and a good understanding of the limitations to aerial port throughput kept more efficient airlift from taking place.

Several lessons about theater logistics can be learned from the DESERT STORM example. First, success can come from a theater logistics organization. Though many of the closure dates for the various deployments were late, enough combat power arrived in time to deter the Iraqis early on, and enough arrived to retake Kuwait in the latter stages of the conflict—an undeniable success. Second, America possesses limited transportation assets. Though the CINC needed combat power urgently to counter the very real threat of a southward Iraqi push, the U.S. forces were very lucky the Saudis were able to handle the reception, onward movement and sustainment of the initial troops until support troops could arrive. There must be a consistent appraisal of priorities, not only among the Services, but also among the force mix of combat and support services. Third, there may be a problem of balancing priorities when the logistics commander is embedded within a Service chain-of-command. Even though General Pagonis had an opportunity to brief the CINC weekly, it was often an impromptu meeting at the airport. Moreover, he had to report through the Army component commander. Despite the obvious professionalism of all commanders involved, there is a chance that

suboptimization may result. Where one Service's needs may be met at the expense of others and those priority calls may not reflect the needs of the CINC.

Somalia.

Another example of joint theater logistics is OPERATION RESTORE HOPE in Somalia. There, U.S. military forces were committed in three distinct phases, each with a unique mission and force requirement—PROVIDE RELIEF, RESTORE HOPE, and UN Operation Somalia II (UNOSOM II). The first operation focused on humanitarian relief. The second combined relief with limited military action to restore order. The final operation was designed to disarm the warlords, build a secure environment for the population and rehabilitate the politico-economic institutions of Somalia. As conceived, the U.S. would not be in charge of UNOSOM II, but provide only logistical support and a quick reaction force. In practice though the U.S. forces were used extensively in a manhunt for the clan leader Aideed after the ambush of Pakistani soldiers (Allard, 1995: 5-7).

The logistics support for the first operation revolved around the Marine Forward Service Support Group (FSSG) which ended up providing most classes of supply to the coalition nations. RESTORE HOPE's growing logistics responsibilities were taken over by the Joint Task Force Support Command (JTFSC) which was made up mostly of Army Corps Support Command personnel (Brock, 1999:2-3). The JTFSC was an ad hoc organization, with unclear responsibilities and authority. This lack of direction caused many problems for the JTF. The major problem was the loss of two preposition war material ships (PREPO) because no single authority was in charge of designating ports adequate to receive them. Three PREPO ships arrived at Mogadishu, but could not be

unloaded because of rough seas and austere port facilities. It was known that all three ships had too large a draft to even enter the port, but they could be unloaded via smaller shuttlecraft while anchored outside the actual port. This already difficult task was compounded because the Army specialists needed for unloading were delayed in deploying. In an attempt to fix the situation, one ship was sent to Kismayo where conditions were not much better. Another was sent to Kenya without a diplomatic clearance to offload munitions and was sent back to Mogadishu. Eventually, both of these ships returned to Diego Garcia after two weeks at two different ports, never offloading their supplies (Allard, 1995: 11-12).

Compounding the problems at the port was confusion over which Service was in charge of it. This came about because the Army who should take care of the port doctrinally, did not deploy in country until well after the PREPO ships were anchored at the port. Competition for support presented another problem. In one case, the Marines held back shipping in favor of their own supply ships (Allard, 1995: 11-12).

A further example comes from the logistics for UNOSOM II that were organized around the UN Logistics Support Command (UNLSC), primarily an U.S. Army Corps Support Group. Originally, the UNLSC was to manage theater-level support for common user items for the coalition's 21 nations. Each country was to provide their own requirements for specific items like ammunition and maintenance. As combat intensified self-sufficiency tended to brake down and the UNLSC provided "both general support and direct support to a large portion of the coalition" (Allard, 1995: 23). This small organization that handled combined theater logistics succeeded because of the

"extraordinary efforts of U.S. logistical personnel…[and its theater focus will be] copied in all future peace operations" (Allard, 1995: 23).

Somalia teaches several lessons about theater logistics. First, there needs to be definite unity of command at the seaports. Next, someone must be able to set priorities at the ports of debarkation. Not only did the Services get in the way of each other, they prioritized the logistics support without clear guidance on how to best support the priorities in the CINC's plan. The Army component commander, who was nominally in charge of the JTFSC "didn't know who was making decisions on the flow of forces into the theater" (Brock, 1999: 5). Third, ad hoc organizations tend to force their people to perform in extraordinary ways to succeed. The goal should be to develop and train an organization that works well so that the staff does not have to perform in a super-human fashion to succeed. Finally, Somalia underscores the problems that can happen when logistics does not have a highly-placed advocate. Support troops were delayed, infusion of needed supplies were delayed and even turned away.

Croatia.

In operations in the former Republic of Yugoslavia another centralized theater logistics organization was used in Croatia. Here, Major General Farmen led an ad hoc logistics command that ran NATO's theater logistics for OPERATION JOINT ENDEAVOR, with headquarters located in Zagreb Croatia. General Farmen had direct access to the CINC, the same as the land, sea and air component commanders. The logistics command also had to meld the logistics of multiple countries. "Because each participating national military did things differently, it was crucial to account for and control all resources. Success depended on knowing what one had, what one needed,

where it would come from, who should get it, and who would finance it." Logistics was the responsibility of each nation and each participant had some shortcomings in a joint and combined environment. The synergies the CINC needed came from a centralized versus a national control of services, contracts, assets and funds. Finally, since General Farmer was the *commander* for support, he was able to assume the role of commander of forces in Croatia (Farmen, 1999: 36-41).

Croatia teaches several lessons regarding theater logistics. One, "any military scenario that is not dedicated to optimization and mutual synergy—that is derived from proven or potential multinational [or joint] logistics practices such as collective bargaining for outsourcing and contracting, common funding, centralized support services and reduced manpower requirements—squanders precious resources" (Farmen, 1999: 42). Second, a commander is able to assume geographical command if needed, where a less robust organization could not. Third, his command was a component though his organization was ad hoc, not based on doctrine, planned for or exercised. The logistics command was not buried within a Service, and he had direct access to the CINC. It was critical that the logistics headquarters be responsible solely to the CINC. "Theater logistics responsibilities, without full authority in theater, results in decision layering, dysfunctional prioritization, untimely deconfliction of logistic mission issues and obfuscation of logistic responsibilities" (Farmen, 1999: 37).

The U.S. has used a joint theater logistics command in the past. Problems develop when there is a lack of inter-Service knowledge, especially concerning aerial and seaport operations. There should be clear prioritization in terms of what is shipped, where it is offloaded, and what moves up in the queue when problems begin to disrupt

planned operations, either at the ports or with the overall deployment. Further complications to the effectiveness of a theater stem from inadequate logistics advocacy at the CINC level. Someone with the CINC's "ear" and a clear theater-level logistics plan may be able to keep logistics forces from being delayed or throughput being hampered when ports become inundated.

Do the CINCs plan to use a joint theater logistics commander today?

This section will look at a description of a meeting of the CINCs' J-4s in 1996 and report on a series of interviews the author had with the current J-4 staffs in 2000 and 2001.

Colonel Paul Inman in his Army War College paper described the opinions of the various CINCs in 1996 concerning a JFLOGCC. As the representative of U.S. Forces Korea, he attended a logistics off site meeting sponsored by the Joint Staff J-4 at Fort Lee, Virginia, and recorded the CINCs representatives' points of view. One of the meeting's purposes was to discuss a recent Joint Staff proposal to design a theater logistics organization. The Joint Staff gave several proposals and recommended a Joint Logistics Management Center, battle rostered and modeled after the JFACC, be the model for theater logistics. Col Inman reports that the Services and the CINC J-4s generally rejected the Joint Staff's proposals because each CINC wanted to run logistics in a unique way to fit individual theater requirements (Inman, 1997: 13-14).

CENTCOM.

U.S. Central Command (CENTCOM) rejected the theater proposal since it planned to use the Army's Theater Army Area Command (the predecessor to the Theater Support Command) to execute its theater logistics mission. The TSC would report to the

Army Component Commander and be led by a Lieutenant General (Inman, 1997: 14). This is in line with CENTCOM's history.

Historically, CENTCOM has been the innovator in joint theater logistics. They were the first to use the concept in DESERT STORM using Lt Gen Pagonis as a logistics commander. They again used the concept in Somalia, building theater logistics around the UN Logistics Support Command. More recently, CENTCOM has coordinated with the Air Force Doctrine Center and the Air Force's Air Mobility Command to determine the feasibility of using the TSC organization as a single provider for operational level sustainment. CENTCOM currently wants to use the Army's TSC as the nucleus for joint theater logistics, just as it used its predecessor, the TAACOM, under Lt Gen Pagonis in Saudi Arabia, but with a joint commission, employing joint personnel (Stankevitz, 2000).

In a recent interview, CENTCOM clarified its position. CENTCOM does not necessarily want the TSC, pre se. They want an organization with a theater focus and the TSC is the closest currently formed organization that fits the bill. From their point of view, certain organizations have inherent capabilities that others do not. For instance, the Air Force as a Service cannot set up a pipeline to deliver bulk fuel, only the Army can do that. CENTCOM's goal is to codify an organization as a logistics executive agent, but be flexible on its makeup. They have currently planned to use the Army's 377th TSC, an Army Reserve unit based in Louisiana as its corps theater logistics executive agent. The Air Force disagreed with the concept and issued a position paper as a reply to CENTCOM's proposals. As a compromise, CENTCOM would be willing to use the TSC headquarters element consisting of about 250 people reporting to the J-4 with its tactical units executing the theater mission. CENTCOM believed that this might alleviate

some of the Air Force's worries about having the logistics commander under a Service commander versus a joint commander. One can believe that CENTCOM will use a single commander for logistics in its future operations (Castaing, 2001).

PACOM.

In 1996, U.S. Pacific Command (PACOM), unlike CENTCOM, planned for military engagement in a very mature theater of operations, Korea. There the logistical lines were well established and they planned to use the Army's TAACOM, similar to CENTCOM. In their interview, PACOM J-4 expressed that logistics lines and agreements on mutual support have been worked out in advance among the various Services in Korea. No over-arching organization would run theater logistics on the peninsula. For JTFs outside the Korean theater, the practice of naming executive agents would constitute theater logistics. The Service named as executive agent would be responsible for coordination of logistics requests and support. They in turn would request support through the Theater Logistics Operations Center (TLOC) located at PACOM, ran by an O-6. The TLOC is comprised of the Logistics Resource Center and the Joint Movement Center and would prioritize logistics support for the theater as a whole (Mann, 2001).

SOUTHCOM .

Inman goes on to report that in 1996, Southern Command (SOUTHCOM) planned to use an ad hoc organization for joint logistics (Inman, 1997: 14). Recent interviews revealed that SOUTHCOM has taken steps toward a more formal approach to theater logistics. SOUTHCOM would stand up a Logistics Operations Directorate (LOD) with a Logistics Readiness Center and Joint Movement Center operating within it. The

LOD would be responsible for all classes of supply, such as fuel, as well as traditional logistics responsibilities like mortuary affairs. Moreover, the JMC would coordinate, track, monitor and advise on all movement from deployment, sustainment and redeployment, as well as control all modes of transportation within the theater. The LOD would be commanded by an O-6 and would report to the SOUTHCOM J-4. The TSC would be responsible only for Army logistics concerns. During peacetime the LOD resides as a cell within J-4 and exercises its joint role at least annually (Lewis, 2001).

EUCOM.

In 1996 EUCOM planned to use an ad hoc logistics organization for theater logistics. Additionally, EUCOM would also use the TAACOM when feasible. EUCOM's propensity for multiple JTFs dictated multiple approaches to joint logistics (Inman, 1997: 14). In their interview, the EUCOM J-4 staff stated that a more formalized approach has been adopted. Executive agency responsibilities have been assigned to the various services during deliberate planning. In each Operations Plan (OPLAN) specific common-user logistics responsibilities have been assigned to the Services. All supported Services would coordinate and request logistics support to the executive agent, who would in turn, aggregate the requests for the theater. These wartime responsibilities should closely align with the peacetime dominant user concept. This concept gives responsibility for logistics support to the principal consumer within a geographic area and is outlined in EUCOM Directive 60-11. In short, those Services that carry the logistics load in peacetime would normally carry that same load during war (Cravens, 2001). Interestingly, the organization that would carry the bulk of these responsibilities, U.S. Army Europe's (USAEUR) 21st TSC, has a total Army focus. They do not have any

joint officers on staff or any liaison officers to coordinate support. A question and answer session with the 21st TSC Chief of Staff underscored the fact that the TSC focuses totally on Army requirements (Crawford, 2001).

Joint Forces Command.

Joint Forces Command (JFCOM), formerly Atlantic Command, has lost most of its area of responsibility that may entail a crisis—basically it now consists of oceans and the Azores. In 1996, they planned to use an ad hoc organization like they did in Haiti (Inman, 1997: 14), but now they do not have any plans for theater logistics (Robillard, 2001b).

Though the CINCs and the Services rejected a single doctrinal approach in 1996, they each planned to use some form of theater logistics—either a formal organization like the TSC, or an ad hoc one, using executive agents. It appears the CINCs did not reject the concept but merely rejected an attempt to impose a single solution, being afraid of losing the ability to design forces as they saw fit. Though Colonel Inman sees this as lack of senior leader support for the concept, I see it exactly the opposite. Anticipating setting up logistics with a theater focus shows that the CINCs support a concerted effort to manage theater logistics. Moreover, an important outcome of the 1996 meeting was an agreement to define theater logistics' mission as to "synchronize, prioritize, direct, integrate, and coordinate the common user and cross service logistics function of service organizations" (Inman, 1997: 12). The recent interviews show that the various CINCs are moving toward formal theater logistics, rather than away. The CINC's may not want a type of organization dictated to them, but they are planning on using a theater logistic organization of some type.

Summary: Can there be a theater logistics component?

Considering U.S. law, military doctrine, leadership opinion, and current CINC plans against the backdrop of history, there is no reason why a theater logistics component could not be used. Law and doctrine allow for commanders to use their resources as best they can to accomplish their mission. Leadership generally wants the forces to be used as a joint team with synergistic multiplication of capability to be pursued whenever practical. History has shown that joint, centralized logistics can be used effectively and that the CINCs plan to use joint logistics anyway.

Conclusion: A Theater Logistics Organization

There can be a logistics component. The question is what does that organization look like in peace and in war, and what kind of authority does it possess? This section presents the Joint Staff's options for Joint Theater Logistics Management (JTLM), and concludes with a proposed functional logistics component that will be the basis of the remainder of the paper.

Organization.

Colonel Inman reports that the Joint Staff offered five proposals for a joint theater logistics command and control organization in 1996. The proposals were:

1) Take an existing Service organization out from underneath the Service commander and have it report directly to the CINC. An example would be the Army TSC working for the JTF commander.

2) Take that existing Service organization and leave it within its chain of command still reporting to its Service component commander, but give it a joint responsibility.

3) Augment the CINC's J-4 staff so they would have the capability to conduct theater logistics.

4) Develop a new command in each theater reporting to the CINC.

5) Form a Joint Logistics Management Center (JLMC). In peace this would be a small cadre under the J-4. In war it would be augmented to run theater logistics and would report directly to the CINC. The Joint Staff recommended this course of action because it resembled the JFACC—it had a truly joint nature, direct access to the commander, and existed as a small unit during peacetime (Inman, 1997: 13).

The Proposed Logistics Component

This proposal modifies the Joint Staff's recommendation for a JLMC to make it a full component on par with the land, naval and air functional components. This section will describe the rank and role of the JFLOGCC, the role and capabilities of the component, and the span of control of the component.

Commander.

The logistics component commander must be on par with the other functional component commanders. There is no need for doctrine to determine a particular rank since the size of JTF dictates the rank of the component commanders. As a minimum though, the component commander should be of equal rank to the other functional commanders. The CINC should designate the commander with consultation with the Services, TRANSCOM and DLA. The commander should be a senior logistician, familiar with the theater and area of responsibility for the contingency. He could be an Air Force air mobility expert, an Army transporter, or a maritime logistician. The commander should be clearly designated as the theater's logistics commander and ideally

be an asset of the theater, like a numbered Air Force commander or a TSC commander. If sourced outside of the theater, the logistics commander should be able to participate in theater exercises and planning. Similar to the JFACC, the Service with the preponderance of logistics assets and the capability to plan, task and control joint operations could source the commander. As a minimum the commander and his staff should be designated in peacetime so that the nucleus of the component can work and train together in peace before a crisis.

Role and Capabilities of the Logistics Component.

The component's role will be to coordinate logistics for the CINC at the operational level. The JFLOGCC does not need to have control over Service logistics support at the tactical level, but he does need "access to information residing in them" (Robillard, et al., 2000: 14)—total theater asset visibility. The component must have the capability to know exactly where all incoming personnel and equipment are outside the theater and when they will arrive. The component must also know exactly what is available within the theater to meet the needs of units critical to the success of the CINC's plans. He will be the sole validating authority for the TPFDD, thereby avoiding the problems of haphazard changes encountered in the past. He will determine the priorities of all requested support from the Services and apportion the support in accordance with the CINC's plans. The component will be responsible for all ports of embarkation as well as responsible for reception, staging and onward movement of theater forces and equipment. The JFLOGCC will be the sole conduit of logistical requests for support outside the theater and the coordinator of intertheater requests for

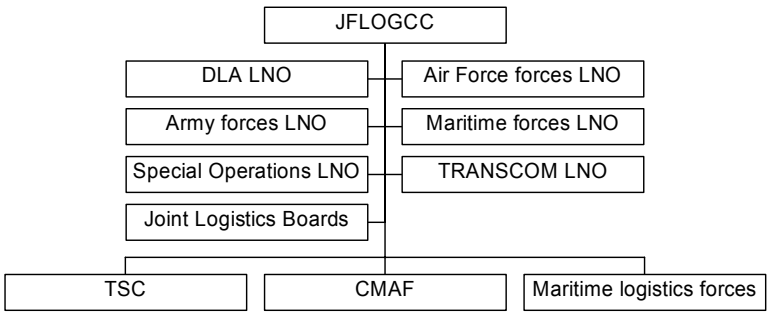
support among the Services. The JFLOGCC will command all operational, common-user logistics forces and may be designated the rear-area commander for the contingency.

Forces.

Services still administer their forces, but OPCON of log forces go to the JFLOGCC for those that could be assigned or attached from his Service. Forces made available from other Services would transfer TACON to the logistics commander. Following Joint Publications, the organic tactical organization of units should not be destroyed to apportion forces to the log commander. Ideally, the JFLOGCC maintains control at the operational level of war. Tactical level logistics is tactical best left to control of tactical commanders. Responsibilities such as bulk distribution of fuel and joint munitions are at the operational level and should be the purview of the JFLOGCC. The logistics commander would manage inflow and distribution and the forces that do this must be under the command of the JFLOGCC. If the JFLOGCC is assigned as the rear area commander he must have OPCON of combat and security forces in the rear area.

Organization.

The logistics component should be organized utilizing existing logistics organizations so that tactical-level needs can be easily funneled to the logistics component. The following is a notional organizational chart:



The logistics component would maintain liaison with the Service components as well as with TRANSCOM and the DLA. The component will execute its mission through the TSC or TSC elements in the contingency, the mobility air forces, and the maritime logistics forces. Commander, Mobility Air Forces (CMAF) is a concept put forward in Chapter four and represents a single commander for all air mobility assets. The joint logistics boards would also reside within the component with some being delegated to the staff of the execution forces.

The logistic component's forces would be the TSC and its controlled forces, the CMAF and his controlled forces, plus any additional operational- or strategic-level forces made available for common-use by the Services. The logistics commander would not take equipment or personnel from essential tactical units. The logistics commander would only apportion logistics support in line with the CINC's mission plan. If a certain tactical unit is needed in the plan it receives what it needs to fulfill its mission. If another unit is not as critical as others are, its support would be curtailed. All of the functional components would have the opportunity to justify their requests for support around the CINC's table. Each component's requests should be based on desired combat effects and those effects could be weighed versus the CINC's intentions. Therefore, during a council of war, the CINC's plan would be enabled by a logistics plan that mirrors it while ensuring each of the Services' required contribution is supported logistically.

Ports of Debarkation.

The JFLOGCC should control the ports of debarkation as well as all the modes of transportation within the theater. Control of the S/APODS allows for efficiencies

explored below. In short, a single individual should command each port and those commanders should report to the logistics commander.

Liaison.

One of the key parts of logistics is the movement of forces and material into the theater. When the CINC decides on forces and prioritizes them, TRANSCOM takes the responsibility to move them. If the CINC's priorities are to be maintained there must be robust liaison between the theater and TRANSCOM. The logistics component is the ideal organization to be the focus of this liaison. This relationship should go beyond mere requests for lift or for tactical control of mobility assets. For instance, if the CINC wants tanks on the first train out of a SPOD, then those tanks need to be the last thing loaded on the ship at the SPOE. To maintain throughput, items cannot be allowed to stack up at the ports, so whatever comes out first is generally trucked out first. Therefore, unless the tanks are positioned at the SPOE to be the first out of the ship, they will not be the first trucked out of the port. Everyone along the logistics chain must know exactly what the theater's priorities are as a whole. The JFLOGCC is key to accomplishing exactly that. As both the spokesman for the theater and the single point of contact, the JFLOGCC can answer questions about prioritization from outside the theater.

Summary

This chapter has shown that a logistics component can exist and proposed that the logistics component be the agent to execute joint theater logistics. In short, U.S. law allows a logistics component, history shows that it can work, and current leadership is pursuing theater logistics implementation.

III. *Should* there be a Logistics Component Commander?

A CINC can design a theater logistics component, but should he? This chapter will answer that question in three ways. First, by looking at how a logistics component follows the principles of war it can be determined if the concept is built upon solid ground and follows the timeless principles that guide military application. Second, by looking at seven ways a logistics component brings efficiencies to a theater, some insight can be gained to help determine if the concept is beneficial. These are elevating the relative importance of logistics, enabling theater prioritization, consolidation of the contracting effort, TPFDD discipline, A/SPOD efficiency, theater visibility, and reduction of redundancies. Third, by analyzing some potential problems with a logistics component, one can weigh the benefits versus the costs and determine if the concept should be adopted.

Principles of war

Any discussion about changing military doctrine must first consider how the change measures against the principles of warfare. These principles "represent the best efforts of military thinkers to identify those aspects of warfare that are universally true and relevant" (JP 1, 1995: III-1). These principles serve as the base for U.S. doctrine, and are *objective, offensive, mass, economy of force, maneuver, unity of command, surprise,* and *simplicity.*

Objective.

Every military effort must work toward a clearly defined objective; tactical objectives contribute to operational objectives, and each operational objective must

contribute to strategic objectives. A formal theater logistics organization follows the principle of objective by directing logistic effort toward definable objectives. The traditional ad hoc organization typically doesn't have clear authority or command relationships with the other components, and there is much guessing about duty and responsibility. The TSC reporting to the Army commander may be given theater responsibility, but will the Army structure the TSC and give it the resources necessary to carry out its theater mission? For instance, the 21st TSC that carries a large theater role in EUCOM has no joint focus (Crawford, 2001). Doubt remains when a Service organization tries to perform a joint task. Doubts about parochialism and divided loyalties as well as a Service's inherent abilities will persist until some agent is codified to handle operational-level logistics. The logistics component can alleviate these doubts.

Offensive.

Taking the offensive is often the best way to achieve objectives, and going on the defensive is only a temporary state before going to the offensive. Logistics in general enables the offensive, and a logistics component may be a force multiplier by fiercely applying the CINC's priorities and ensuring the force mix envisioned by the commander is in place, supplied, and maintained. Service logistics ensures each Service is as ready as it can be, often at the expense of other Services, thus unintentionally undermining the CINC's intentions. A logistics component is a good way to ensure the Services are supplied in accordance with the CINC's desired offensive effect and is therefore a good way to ensure the best chances for the offensive.

Mass.

To be victorious, forces must be applied with skill so that "relative superiority is attained at the decisive point" (Clausewitz, 2001: 159), and if many "strike few at the selected point, those…will be in dire straits" (Sun Tzu, 2001: 159). Logistical mass can only be obtained by a synergistic relationship of all the Services in a theater. If an Army unit needs HUMVEE tires, it should be able to get them from Air Force units that have a surplus, not from the supply chain reaching back to the CONUS. A logistics component can have a full understanding of what exists in theater and apply the CINC's priorities to ensure the forces that need support gets it at the expense of those units at a lower priority. If logistical mass can be achieved, then combat mass is multiplied.

Economy of Force.

Sun Tzu writes that if a commander can keep his forces unified and his opponent fragmented he will be victorious since he will have mass at the critical point (2001:159). Economy of force prevents forces from being siphoned off on secondary tasks, thereby allowing for mass. Logistical economy of force denies Service stove-piping. Any deployment or sustainment of forces takes up limited airlift and sealift. Without a logistics component directing all deployment and sustainment along the CINC's priorities, some Services will gain at the expense of others. If this does not reflect the intent of the CINC then the economy of force principle has not been followed. Only the most crucial forces should arrive when and where they are needed, otherwise, we have extra capability where it is not needed and the ability to mass has been hindered.

Maneuver.

Maneuver is the key to mass; forces moving to obtain mass and preserve economy of force keep the enemy off balance, protects friendly forces and allows for the exploitation of successes (JP 3-0, 1995: A-2). Again, logistics in general enables maneuver, but organized logistics multiplies its effect. All classes of supply must be at the right places to allow for maneuvering forces to draw upon them and deploying forces must arrive in the right place to effect the outcome. A logistics component strictly enforcing the CINC's priorities in both deployment and sustainment of the crucial forces enables synergies to be realized where Service stove-piping would not. More telling, Service stove-piping may be inherently incapable of maneuver on its own—it just may not possess the training, people, or expertise to perform that mission.

Unity of Command.

There should be unity of effort under one commander for every objective. "All forces employed in pursuit of a common purpose" should operate under a single commander (JP 3-0, 1995: A-2). This principle is the primary reason for a logistics component. Logistics troops share the common purpose of supporting the theater. They may be working to support Service-specific forces, but those efforts must be subservient to the theater objective of having the right forces ready and committed at the right place. Only if logistics is working in concert under a single commander can this be accomplished.

Security.

Security denies the enemy unexpected advantages (JP 3-0, 1995: A-2), and entails protecting friendly forces. Crowded APODs and congested SPODs present profitable

targets to the enemy and entails security risks. A logistics component enables an APOD to serve as a port of debarkation, not a safe haven for housing troops. This component also enables clear prioritization and coordination at all ports so that units are on hand to receive shipments and the ports do not become mired in unidentified and unclaimed supplies. The JFLOGCC, with its robust liaison, should help with optimal planning to allow efficient use of the defense transportation system—from units being ready to load at A/SPOEs, to loading the ships and aircraft in the right downloading order.

Surprise.

Mass relative to the enemy can be achieved by "attack[ing] where he [the enemy] is unprepared: sally[ing] out when he does not expect you" (Sun Tzu, 2001: 215). Little effort can bring large reward if the enemy is surprised. Again, logistics enables surprise and a concerted logistical effort under the direction of a component commander multiplies the effect. Importantly, strategic mobility enables surprise on the *operational* and *strategic* levels. The ability to bring an entire fighting force to virtually anywhere in the world allows the CINC to surprise the enemy on a scale unheard of in history and is a uniquely American asymmetric advantage.

Simplicity.

"Simple plans and clear, concise orders minimize misunderstanding and confusion" (JP 3-0, 1995: A-3). This may be the largest argument against a logistics component. By adding a layer of bureaucracy to the logistics formula, the flow of requests and supplies may be more complicated than direct Service requisition. If there was more timely lift available than was needed this would surely be true since no one knows each Service's "system" better then those raised within it. But lift *is* limited,

especially timely lift from airlift and fast sealift. This limitation necessitates prioritization from the beginning of the process. When the TPFDD is written and every time it is modified, the CINC's priorities must be maintained. At the ports of embarkation forces and equipment must be loaded so that the priority shipment is off the vessel first. At the ports of debarkation those priority shipments must be identified, claimed by the right units, and integrated into the theater's forces rapidly. When any of these steps are not followed, confusion, delay and frustration result. All logistics is complicated, but a well-orchestrated logistics component can be simple in its execution. Moreover, a single spokesman presenting the theater's priorities to the world may reduce confusion and simplify logistics by clarifying the theater's needs.

The idea of a logistics command follows the principles of war and can bring benefits to the execution of the plan. But beyond these principles several more opportunities exist that a theater logistics component can take advantage of.

Logistics importance

Though logistics is recognized as a cornerstone of military power, it is often overlooked in a crisis. In the uncertainty and chaos that accompanies the early days of a contingency there is a strong temptation to lower the priority of logistics forces in favor of combat power with the hope that logistics will "just happen." This may result from a lack of a clearly defined position for logistics within the command structure. To be clearly defined, logistics must have a formal organization, a spokesman, a seat at the table of power, and the power and authority of a commander.

A formal organization sends a clear signal that logistics is important to the theater. No longer relegated to the Services and managed by an impromptu conglomeration of

boards and liaison officers, a component command lifts logistics to the same level as the combatant functional commands—with all of the attendant authority and power. In order to focus and use that power there must be a single person representing its interests—the component commander. With full authority to handle logistics for the CINC, he would not be chastised by planners for trying to move desperately needed logistics forces up in priority like how Lt Gen Pagonis was chastised in Saudi Arabia (Pagonis, 1992: 89). A JFLOGCC's inputs would receive due respect since his authority is delegated from the CINC.

Next, a clear sign of the priority given to a mission is the visibility of the mission to the CINC. In DESERT STORM, the lead logistician had to make use of impromptu meetings with the CINC, catching him at the airport in order to provide logistical updates as well as to try to discern the CINC's plans future requirements. Logistics must have an advocate at the CINC's table. This advocate must be present during planning and decision making so that logistics is not overlooked to the detriment of the operation. As a functional component on equal footing with the other components, the JFLOGCC can fulfill this role.

This defined role for the logistics component necessitates the logistics commander be brought out from underneath a Service commander and report solely to the CINC. The component must be on equal footing to the other functional components. Without any layers of bureaucracy separating the combatant commander from his logistics expert, logistics naturally rises in importance and in visibility in the theater. More importantly, logistics forces would not be delayed in deploying in favor of combat forces simply because they did not have an advocate at the place where the priority decisions were

being made. As shown above, this happened in Saudi Arabia where four people constituted the entire theater logistics function for three days until a transportation group arrived (Pagonis, 1992: 89). A similar problem occurred in Somalia where Army logisticians were so delayed, ships had to wait at anchor in the port for their arrival (Allard, 1995: 8-9, 12).

Prioritization of Deployment and Sustainment

To enable the CINC's theater plan, forces have to be deployed and sustained when and where the CINC intended. As the enemy reacts to our moves and the military and political situation changes, the plan changes. Consequently, the CINC's priorities must change accordingly. The CINC considers several priorities: one, deployment order—the order in which forces arrive and two, which fielded combat units receive priority support. The commander's priorities are communicated via the TPFDD and sustainment requests, implemented at the A/SPOEs, A/SPODs, and achieved with RSO&I, supply dumps, and logistic and combatant forces. His sustainment and support priorities should be based on his combat apportionment. A JFLOGCC can help maintain the proper prioritization.

Services request what they need and compete for every resource they can get, for what Service component commander would willingly deny his forces any capability they feel they need? There must be a clear authority that takes these requests and basically prioritizes them in lock step with the CINC's apportionment of forces and his combat plan. Lift, buildup and sustainment must all reflect the intent of the commander. If anything is moved without thought to how it supports the CINC's plans, the plan is undermined. A logistics component with the authority to validate the TPFDD in light of

the CINC's priorities and to order Services' requests can help ensure that those priorities are met. This requires that no request outside the theater be honored unless it comes from the logistics component.

Beyond establishing priorities by validating the TPFDD and maintaining discipline in its execution, a logistics component can enforce priorities in implementation. The JFLOGCC may be able to influence priorities at ports of embarkation. As long as the log component knows when, where and with what personnel supplies are to be embarked, they can influence the priorities each receives. If there is any doubt at the A/SPOE there is one source to call: the theater logistics component. If there is any crucial supplies that must be moved up in priority, the log component can ensure the port personnel know it by both formal and informal channels.

Once in theater, the logistics component controls priority by communicating it to its forces at the ports, the TALCE, A/DACG and the stevedores. The ship or aircraft with priority is unloaded first. Because of TPFDD visibility discussed below, the gaining unit is prepositioned and ready to receive their equipment as it is unloaded. This is especially important at SPODs where it can take days to unload a ship.

What happens when the logistics plan begins to fall apart because of broken aircraft or deploying units not ready to move when transportation arrives? Logistics priorities must be clear at all levels. TRANSCOM must know which planes and ships to repair a move first, the A/SPOD personnel must know which ship or aircraft must be moved up the queue to be unloaded first. The JFLOGCC is uniquely positioned to have the right answers for the CINC when quick reprioritization must take place.

Lastly, when it comes to deployment, it is very easy for the priority of all lift to go to combat forces. Planners consistently moved logistic forces down the TPFDD in favor of combat forces in DESERT STORM with the same problem happening in Somalia (Pagonis, 1992: 89; Allard, 1995:8-9). People see power as security and want as much of it as they can get. But one cannot forget that without logistics in place, without host-nation support, no one can receive those forces, house or sustain them once they arrive, and they can't fight without ammunition or fuel. A logistics component will allow for logistic priorities to be considered on par with other component needs. Instead of logistic organizations being continually pushed down in priority to allow more combat forces to flow, a sensible compromise can be reached. Only with logistics on par with the other components can this happen.

Contracting

A common problem with modern joint operations revolves around contracting for host-nation support. Gen Pagonis viewed contracting as his "key sustainment issue" (Pagonis, 1992: 73). Early in DESERT SHEILD contracting became the key element of sustainment for the forces in Saudi Arabia. All of the Saudi's supply of plywood was exhausted early in the deployment process and the majority of heavy equipment transports used by U.S. armed forces were contracted (Pagonis, 1992: 73, 123). Furthermore, without a central point for contracting the Services tend to compete and outbid one another. In Saudi Arabia several companies offered different bids to provide the same trucks (Pagonis, 1992: 112-113). General Pagonis was able to see through this scam as the central contracting point of contact and secured a single contract for the existing trucks. If the various Services were engaged in seeking those trucks

independently, they may have bid up the price and ultimately, the Services would have only received a fraction of the trucks that they needed for an inflated price. Only a centralized contracting authority can prevent Service competition and drive the types of bargains American forces need. A JFLOGCC can do this.

TPFDD visibility and discipline

TPFDD visibility and discipline is crucial to the CINC, the units of his command, and to the Services that are supplying the forces and material to the theater. First, history shows that the TPFDD is a living document, changing often. Even in those theaters where deliberate planning has occurred and a plan already exists, the plan changes to reflect the operational situation of the moment. Often changes to the TPFDD occurred that didn't reflect the CINC's desires. This happened when units without authority changed the TPFDD, or when equipment and personnel not planned for on the TPFDD was brought into the theater. General Schwarzkopf believed that 20% of his forces in theater were not planned for on the TPFDD and were invisible to his headquarters. Adding to this problem, CENTCOM repeatedly changed the priority of units and requesting units improperly coded their cargo as "oversized" and "outsized. To gain control of the situation the CINC had to daily freeze the TPFDD and tried to restrict who was able to make changes. Remarkably, units still made unilateral changes without authorization, a problem that remained throughout the conflict and recurred during operations in Somalia (Mathews and Holt, 1992: 22-24; Allard, 1995: 9). If units have the ability to change the TPFDD, they will do so with ferocity. When faced with deployment to a crisis, a unit will suddenly view unplanned for equipment as crucial to their security or capability, and the TPFDD will grow. Moreover, if units change

personnel and deployment dates on their own, the CINC's plan falls victim and confusion will reign. There should only be one agent with the authority to write, then validate the TPFDD and the logistics component is positioned perfectly to do that. A logistics component allows for the CINC to easily maintain control of his TPFDD. More importantly, once the logistics component becomes ingrained in doctrine then training and exercises will instill the practice of using the logistics component as a clearinghouse for TPFDD changes. The mindset of the Services will change so that going to the logistics component will become commonplace.

Beyond maintaining basic control of the TPFDD, a logistics component may bring discipline to the planning aspects of logistics. It became apparent in DESERT STORM to General Schwarzkopf that "light forces are not light—all units required more lift than the planning process predicted" (Mathews and Holt, 1992: 25). A logistics component commander who is continually engaged with the theater's logistics needs and deeply involved in planning should be in a good position to ensure that the TPFDD reflects reality. It should allow for more realistic airlift delivery dates and for more accurate forecasting of special handling cargo that requires advanced diplomatic clearances (Allard, 1995: 11). Furthermore, the JFLOGCC's authority to validate transportation requests coupled with his connectivity with units controlling the S/APOEs should stop units showing up with different cargo than they planned for. Planning should become much more realistic once the armed forces realize that the JFLOGCC has the power to refuse unplanned-for transportation and that unplanned-for personnel and equipment will not be shipped without JFLOGCC approval. The mindset of depending

upon flexibility at the A/SPOEs should change in favor of much more strict adherence and therefore, more accurate planning.

Another aspect of visibility is access to the TPFDD in the theater. The ad hoc logistics organization in Somalia failed to ensure that all units had access to TPFDD data. For the first 17 days of RESTORE HOPE the Air Force Logistics Group did not know when their personnel were arriving in theater (Brock, 1999: 6). Units must know when and where their stuff arrives in theater in order to pick them up. If combat units cannot anticipate delivery and must wait to be called to retrieve their supplies, crucial time is wasted. These units should be proactive to assist in offloading the equipment (JP 4-0, 2000: I-12) and the aircraft or ship cannot be turned quickly if the TALCE, Arrival/Departure Airfield Control Group (A/DACG), or stevedores have to do this alone. If units are not proactive to claim and move out their equipment, materials pile up and hinder port operations. To avoid this, supplies must be moved out of the port as soon as possible. To illustrate, in the effort to prevent supplies from building up in Somalia any unclaimed or unidentified supplies were shipped out with the next unit that could take it, if it was meant for them or not. Redistributing the misdirected supplies to the right unit became a low priority (Brock, 1999: 5-6). A proactive authority for logistics with good TPFDD visibility could ensure receiving units are in place to receive their supplies and can establish a proper priority for redistribution if they are misdirected.

PREPO.

The final part of theater visibility is full awareness of the prepositioning of war material, PREPO. PREPO allows the CINC to place materials where he needs them so he does not have to rely on external transportation forces to move it into theater. In a

mature theater PREPO is generally where it needs to be, like on the Korean peninsula (Tomczak, 2001). In unplanned for areas where combat occurs, and the PREPO is not where it is needed it must be moved. This takes up limited mobility assets either from within the theater or reliance upon external forces. If the theater has time to predict a contingency and move this equipment well before resources begin to deploy into the theater, there is not much of a problem. But if combat occurs with little to no warning, moving malpositioned PREPO complicates the deployment. A logistics component will be able to prioritize when that PREPO should be moved and decide where it should go. Moreover, in a contingency's initial stages, the JFLOGCC has the ability to think about theater PREPO before the commitment of CONUS-based forces and start moving it before lift assets become dedicated to the general deployment.

Efficiency at the S/APODs

Efficiencies could be gained at both aerial and sea ports of debarkation because of a JFLOGCC for several reasons. First, with logistic forces receiving the priority they need, they will be in position to receive the deploying combat forces as they arrive. In DESERT STORM General Pagonis had to "impress" deploying combat soldiers as they arrived to work as logistic forces (Pagonis, 1992: 99). He had to steal manpower just to be able to function. Luckily, a unit of stevedores arrived just two days before the first PREPO ships sailed into port. Remarkably, the General had to take two-thirds of that unit and press them into service as military police to keep the roads clear and the traffic moving (Pagonis, 1992: 91); the remainder did their trained job and augmented the host nation stevedores at the seaport.

The next efficiency gained could be gained from simple prioritization. When several aircraft arrive at an APOD or several ships pull into port one of these vessels must be unloaded first. If all of these personnel worked for the logistics component they would be responsive to the priorities that he sets forth, and that in turn would reflect the priorities of the CINC.

The other efficiency to be gained from a JFLOGCC stems from preserving the primacy of purpose at the ports of debarkation. General Brown, Deputy CINC for TRANSCOM, put it well when he said that throughput must be the goal for logistics, especially the ports. If an aircraft can be turned 4 minutes quicker, that equals throughput. If you can achieve efficiency with fewer people, that equals throughput. Throughput must be the primary purpose of the A/SPODs. To this end combat forces should not be billeted there even though they are often the best places to ensure force protection (Brown, 2000). Once combat forces, including tactical air units, are allowed to live at the ports, encroachment on the working areas becomes a real problem. Personnel unfamiliar with the workings of the port may inadvertently encroach on runways or crane operation areas and disrupt cargo handling, reducing throughput which is exactly what happened at Mogadishu International Airport during Somalia operations (Allard, 1995: 13). Similarly, any space given to combat forces, equipment or aircraft, takes away space that could be used to service more airlift aircraft or used to move material from aircraft and ships to delivery trucks. Additionally, if the troops at the ports work for the same boss their efforts can be orchestrated. When maximum throughput has been achieved, the actual amount of stored equipment is decreased. This is very important since our prepared ports and airfields are predictable targets that allows our

enemy asymmetric targeting (Shenseki, 2000). A/SPODs are an American centers of gravity and must be protected from exploitation. The JFLOGCC is uniquely positioned to accomplish this.

Theater visibility

A logistics component that is coupled with capable and robust information systems bring the possibility of total asset visibility to the theater and beyond it. A proactive JFLOGCC could know exactly what is being loaded at A/SPOEs, when it is due in theater, where it will go, and how it will get there. He could determine with what priority supplies will be unloaded and integrated into the theater, and especially have visibility on what exactly every unit in the theater has in terms of supplies. With this bird's eye view of the theater the JFLOGCC can apply the CINC's priorities. He can take extra food at a Marine unit and give it to hungry Air Force personnel; he can take ammunition from a unit not slated to fight and give to the one that is, thereby preserving the principle of economy of force and multiplying the effect of mass. This visibility acquired by the JFLOGCC can also allow for easy diversion of units en route.

Another aspect of theater visibility stems from the amount of material shipped outside of the defense transportation system (DTS); a JFLOGCC should know what is being moved outside the DTS. General Brown stated that 10% of our stocks, primarily medical supplies, are shipped by commercial carriers and are invisible to planners and logisticians. What impact would war have on these shipments? If units must order their supplies through a central function then the logistics component commander knows what is being shipped commercially. If these shippers refuse to deliver because of the risks of war, then the JFLOGCC is in a position to apportion forces to move that cargo from

wherever it is dropped. At any given point in the process, by understanding the priorities of the CINC and the needs of the Service components, the right amount of assets can be dedicated to moving the dropped cargo. Similarly, if that commercially shipped cargo arrives at its planned destination, it has to enter the defense transportation system at some point so that the requesting unit can receive it. Again, if it was coordinated through the logistics component, this cargo can be prioritized and planned for along with traditionally shipped cargo; the surprise of unplanned for cargo can thereby be avoided. A JFLOGCC enables this.

Next, the establishment of a doctrinal logistics component may provide impetus for the integrated information system required to make total theater visibility a reality. A logistics component must be able to access the information contained within the Services logistics support structure, and a doctrinal JFLOGCC could provide the leadership needed to drive integration, and it may provide the impetus for funding.

Joint Movement Control.

The final aspect of theater visibility entails awareness and control of theater movement, and Joint Movement Centers (JMC) typically handle this. JMCs already exist in doctrine and operate on a day-to-day basis to manage theater transportation during peacetime. A logistics component capitalizes on this concept in war. Once personnel and material arrive in theater TRANSCOM's responsibility ends. Therefore, the CINC must be able to optimally use his theater transportation assets. This optimization entails coordination between combat forces transporting themselves and the logistics vehicles transporting supplies. In DESERT STORM, Lt Gen Pagonis deconflicted road movement by designating which roads could be used by logistic and which could be used

by combat forces (Pagonis, 1992:122). Only a central figure with a grasp of both the logistic plan for movement and a grasp of the tactical plan for moving combat forces can make that type of call. Beyond road movement, the CINC has airlift assets operationally controlled by him and more may be "on loan" from TRANSCOM. First, those assets he owns must be apportioned between logistics requirements and combat. For example, C-130s may haul supplies from APODs to tactical assembly areas for the Army or conduct offensive airborne operations. Determining how best to use theater logistic assets should be a core competency of the JFLOGCC. Next, a CINC may request that strategic assets belonging to TRANSCOM be temporarily placed under his control to meet urgent intratheater movement needs. For Task Force Hawk, strategic airlifters were placed under the tactical control of the theater CINC to move an Army Aviation Brigade Combat Team (Kosovo, 2000: 42). A logistics component can determine what strategic assets are best to use and help the CINC determine which assets to request. For instance, airlift may not always be the best or quickest way to transport units, and the JFLOGCC can help decide this for the CINC. Moreover, with the MAF as part of his staff he has direct access to the TACC for lift requests, direct impact on MAF assets, and a direct liaison with TRANSCOM. A logistics component enables total integration of all theater movement assets. The roads can be deconflicted and movement prioritized; airlift can be apportioned and requests for control of strategic assets assessed and coordinated.

Preventing Duplication of Effort

A functional logistics component has great potential to reduce the effort to deploy and sustain armed forces in a contingency. Efficiencies may be found in cross-Service

support, providing a theater-wide logistics unity of purpose, and by reducing logistics inflation.

In cross-Service support, one Service supplies another. This is not a predominant user assuming responsibility for logistics—logistics command and control remain with the component headquarters. This is when capabilities brought by asset visibility to the JFLOGCC enable the needs of one Service can be met by another Service. This can simply be a prioritization of units and the siphoning of excess resources to a more critical unit, or better yet, a function of logistics filtering. By this, when a Service requests support, this request goes through a logic filter where the component's staff determines if the need can be met from within the theater. The goal is to minimize any additional strains on the limited air- and sealift supplying the theater from without. In Somalia, units often rotated equipment from unit to unit within its own Service, but this did not always take place between the Services. When the Marines were requiring large lift support for incoming HUMVEES, the Army was requesting lift to ship HUMVEES out (Allard, 1995: 11). A logistics component with theater visibility can determine best when cross-Service support can and should take place. One must keep in mind though, that this practice would necessitate a robust information system to track the accounting of assets from one Service to the next, so that the units get their "loaned" equipment back in the end. The directive authority for logistics possessed by the CINC allows this to legally take place. This would entail a shift in mindset from thinking about what a Service needs in a theater to what the theater needs as a whole. The JFLOGCC would be the representative for the theater and its spokesman to the world.

Another efficiency improvement can be generated by a theater-wide unity of purpose. In DESERT STORM, each combatant functional command procured enough antitank ammunition to destroy the entire Iraqi tank force by themselves. Was this a waste of limited transportation that could have been prevented by a JFLOGCC? Without a substantial shift in mindset each Service will do its utmost to procure every scrap of ammunition and equipment that may help in its portion of the mission. On the other hand, with a shift of mindset from Service to a theater, each Service can expect and request supplies commensurate with its role. The JFLOGCC can serve as the arbiter among the Services acting as a kind of touchstone regarding the CINC's priorities. The logistics component with its theater-wide focus would be uniquely positioned to question excessive requests and keep redundancy to a minimum.

Just as redundancy may be kept to a minimum, logistics inflation may be reduced. When a fielded unit requests a part they do so through normal channels assigning a priority to the request. When that part does not arrive as expected or needed and there exists a lack of information about its whereabouts, the unit tends to reorder the part. This second time it may be ordered with a higher priority or through informal channels—direct to the home unit or from the manufacturer itself. The units want the parts, by hook or by crook. This results in several orders for the same part, each with varying priorities, trying to use the same limited transportation. This leads to additional monies spent on multiple reorders and wasted transportation, thereby limiting the theater's capabilities as a whole. A centralized conduit for all such requests will allow transportation apportionment that parallels the CINC's force apportionment. Logistics enables combat power; if the wrong logistics priority exists or none exists at all, the needed power will

not be there to enable the execution of the CINC's plan. The CINC's force apportionment exercise may be useless unless a JFLOGCC can take requests, make sure they have the appropriate priority and track and reprioritize them when needed.

A JFLOGCC may bring unity of effort to the theater and maximize the effectiveness of limited logistics assets. Maximum combat power may be brought to bear quicker by a theater versus a Service perspective, efficient cross-Service support, and limited logistics creep.

Problems with a JFLOGCC

We have just given several reasons why a logistics component may be beneficial to a CINC and his campaign; we will now look at why this concept may be detrimental to the execution of the CINC's mission. These areas include difficulties separating "joint" from Service responsibilities, lack of common information systems, and peacetime-wartime differences in operation (Robillard, 2001a). Further potential problems include parochialism, a lack of manpower to staff the component, inefficiencies from a cumbersome organization, problems from a false economy, and incongruities with U.S. law and authority.

Separating "joint" from Service Responsibilities.

One of the toughest obstacles for a logistics component is deciding exactly what it should be in charge of. Since logistics is so closely entwined with the Services it is hard to distinguish Service logistics from joint logistics. The real danger is that in the attempt to engineer a theater focus to logistics, the Services lose the support they need to fulfill their missions. Similarly, the theater should not interfere with the tactical level. Not only does this violate joint doctrine, it would hurt the effective support of fielded units. So at

what point does logistics leave the tactical realm and enter the operational level? Should logistic priorities be decided at the unit level, such as when one squadron receives enhanced support, or should it be at the division or corps level? These problems will plague any overarching logistics organization.

Lack of Common Information Systems.

Most of the efficiencies gained from a logistics component stem from an information system that does not yet exist. The system needed is one that can quickly validate a new TPFDD, have access to each Service's requests for support, be able to aggregate those requests for easy prioritization, forecast the needs, and lastly, communicate the theater's needs to the DLA, TRANSCOM and depots. In 2001, the U.S. military is far from this capability, so not much efficiency can be realized.

Peacetime-Wartime Differences.

Peacetime operations do not use a logistics component. Executive agencies and well-developed responsibilities accomplish logistics for a theater in peacetime. A logistics component would drastically change day-to-day theater operations. This may result in problems as new lines of communication are set up, as new offices are formed and people learn to work together. The time used to "spin up" an organization would waste the valuable opportunity for impact during the early chaotic days of a contingency.

Parochialism.

A feeling exists among some of the senior leadership of the military that one Service cannot be "at the mercy" of the other Services. The thought is that once competition becomes keen, whoever is in charge of logistics would give priority to his native Service. This problem would be multiplied when the logistics function is

embedded within a Service chain of command so that the logistics commander is responsible to the Service component commander. In the same vein, some leadership believes that Services need to provide their own logistics core competency. The fear is that a logistics component would siphon away experts in one area to bolster another, thereby suboptimizing. For example, such a commander may take TALCE troops away from unloading an aircraft to bolster Army troops defending the base. Logistically the asset that is to be guarded is the aircraft, not the base, and if in the course of the firefight the plane is destroyed or even damaged, throughput is decreased, perhaps permanently. On the other hand, if the plane is unloaded and makes an escape but the airfield is lost, that aircraft can continue to lift in material from another APOD. Another example would be airplane mechanics being moved to work on tank engines. These would be cases where short term fixes equal long-term losses. Each Service should maintain its organic structure (JP 3-0, 1995: II-10).

Lack of Manpower.

A logistics component requires resources on two levels: during peacetime for training, and during war for execution. Any group that works and trains together functions better. Therefore, if the logistic component is going to perform its mission the best it can in wartime, it must be organized in peace to practice as a team. This takes a dedication of scarce headquarters personnel. In addition, any headquarters function requires a minimum staff to operate. This is true in peace, but especially in war. A theater logistics component would have to be augmented during war and this means taking troops away from Service-specific functions to work at the theater level. This

hinders the Services in their quest to support the fight and may require more transportation assets to bring the additional people in theater.

Cumbersome organization.

There is a real threat that the logistics component would become a large, cumbersome entity. Not only may it be physically large, but its span of command and control may be too large to be effectively controlled. This logistics component may have a large footprint requiring massive support in its own right to the net effect of countering any possible gains. Beyond the shear size of the headquarters, the net size of the command in its entirety is daunting. Everything from rear security forces of all Services, to medical care, to working the ports would be under the command of the logistics component. These troops would be from every Service and spread throughout the theater.

False economy.

The logistics component may seem such a great thing by bringing savings in manpower and time that its true effect may be overlooked. The false economy of logistics savings may actually bring with it a loss of combat effectiveness. Additional layers of bureaucracy may delay the responsiveness of filling requests. Moreover, all Services may receive mediocre support in general and the priority forces may not receive their enhanced support because of the commune-like mindset resulting from the Services acquiescing to the greater whole.

When a senior leader was asked about joint logistics, he replied, "joint staffs plan, components execute" (ASAM, 2000). He felt that only the components know how and what to employ and how to sustain what is deployed. A logistics component may try to

force a deployment and sustainment priority that runs counter to the wishes of the Service, thereby hurting the capabilities of that Service to support the CINC.

Title 10.

Some believe that establishing a doctrinal theater logistics organization runs counter to U.S. law, specifically, Title 10. The law stipulates that the Services are responsible to logistically supporting their forces in and out of the theater. A theater logistics component may interfere with that relationship and hinder a Service's attempt to deploy, sustain and maintain its forces. A Service may deem that a certain organization or unit is required to support operations that are its core competency. If it can only *request* lift and leaves the decision up to a central authority, that unit may not be given priority and the Service would not be able to accomplish its mission.

Problems Analyzed

This chapter presented potential benefits of a logistics component as well as some anticipated problems of the concept. After balancing the two sides, the benefits exceed the risks. Let us look briefly at each problem:

1) Separating "joint" logistics from Service logistics is not required. The logistic component coordinates logistics within the theater, prioritizes the individual Service requests and aggregates them into the theater's requests with appropriate priority levels. The Services still plan, acquisition, train and equip their forces. The JFLOGCC merely coordinates the effort on a larger scale, balancing the Services' needs with the greater theater's needs. True, logistics unity of command may cause a Service's units to suffer comparatively, but that suffering is for the good of the mission as a whole.

2) Lack of a potent information system to capitalize on the promises of the JFLOGCC may seem daunting. While that system does not exist today, the benefits of total asset visibility are immeasurable. A codified organization may be the impetus that drives its creation. But even during the wait for the fielding of such a capability, having a single spokesman for the theater can generate similar results.

3) The differences between war and peace are indeed profound. Interestingly, these responsibilities would not change in war. The agencies that perform theater logistics in peace would continue in war, but the command relationships would change. Instead of the TSC reporting to the ARFOR, he would report to the JFLOGCC. The most remarkable difference would be in requesting logistical support. Instead of the Services doing this themselves, they would request support from the logistics component. Proper training for both theater and CONUS personnel would be necessary to engrain this new approach, but nothing that should hinder efficient flow of logistics.

4) Parochialism may be a stumbling block in that Service loyalty may undermine joint logistics. Ensuring the logistics component is truly joint and having it report solely to the CINC can solve this problem.

5) Manpower shortages abound and there is no prognosis for it getting better in the near future. A great attribute of a functional component is that during peace the units that make up the component are the same that comprise it during war. Moreover, the JFLOGCC and his staff could be theater assets, dual-hatted to fulfill both peace and contingency responsibilities. The component commander could even be designated from outside the theater, further relieving concerns about joint staff manning.

6) A large, cumbersome organization can present problems due to its scope, but all of the functional components are equally large. The answer is proper exercises and training. A logistics component is no different from any other, facing the same administrative problems.

7) There is a chance that once Services subjugate themselves logistically under a logistics component, all support will be sub-par. The reality is that the competitive American system is maintained. Instead of the competition taking place outside the theater beyond the component's control, the fight happens at the CINC's table. There the Services can fight for prioritization, and be assured that the theater's priorities would be accurately communicated and adhered to. The alternative is often random shipments of cargo, since most of the requests bear the same high priority.

8) Finally, the legality of a logistics component is sound. Law allows for the Services' obligations to be subordinated to the theater's needs. As explained above, the Services do not give up their ability to compete for support, they just give up their ability to seek support by themselves.

Summary

The logistics component adheres to the principles of war and benefits the theater by raising the relative importance of logistics, allowing for complete prioritization of deployment and sustainment of forces, centralizing contracting efforts, increasing theater visibility and TPFDD discipline and by being a champion of S/APOD efficiency. In short, the JFLOGCC controls the logistics process from the theater and prevents any confusion about the requirements and priorities of the CINC. The JFLOGCC also takes Service logistics and melds it into theater logistics to apportion support just as combat

forces are apportioned. The JFLOGCC can maximize a theater's limited logistics and therefore, maximize the theater's combat power. There should be a logistics component.

IV. Mobility Air Forces and Theater Logistics

"Airlift is critical…for two reasons: in most cases it is the fastest way to respond to a crisis and, until the arrival of sealift, it is the only way to sustain the initial deployments" (Allard, 1995: 10).

Modern U.S. warfare comprises several key components, among them are the need for rapid mobility to cover the great distances that must be traveled from garrison to combat, fast and potent combat operations, and reluctance for loss of life. Just as logistics enables combat power, airlift enables the American way of fighting. During most any contingency, American forces will have to travel thousands of miles to austere locations, fight an intensive action and return quickly. Airpower, specifically, mobility airpower, is the only way that can happen. Even in protracted conflicts, the first crucial days are pure airlift. Not until the sealift begins to arrive, up to 1 month after the start of deployment, does airlift begin to relinquish its role as primary lifter. Air mobility enables deployments. Especially deployments that depend upon "quick and decisive responses" (AFDD 2-6, 1999: 1). With this in mind, the mobility air forces (MAF) must be considered a key player in the planning and execution of any logistics plan including any effort to establish theater logistics.

This chapter will discuss how the MAF fit into the theater logistics component concept. Specifically, it will look the Air Force's official stance on JTLM, at roles and responsibilities of the Director of Mobility Forces (DM4), and then look at how command relationships and responsibilities of the mobility air forces themselves would change.

The Air Force Stance on JTLM

Responding to CENTCOM's proposal to establish a theater logistics organization under the Army TSC, the Air Staff produced a position paper which outlines the Air Force's official stance on joint theater logistics. The Air Force does not support a logistics commander, but does agree that there should be an organization under the J-4 that reports to the CINC and handles theater logistics management. This organization would be a Joint Theater Logistics Management Element (JTLME) which would be staffed from the current J-4 and augmented in wartime. The JTLME would monitor and coordinate Service logistics and maintain ADCON over logistics. This is the favored Air Force option since it minimizes impact on Service Title 10 responsibilities and would result in minimal manpower changes (Starr, 2001: 1, 4-5).

The Air Force does not support a Service being the logistics commander since there are concerns about Air Force personnel working for another Service; this may violate unity of command. The Air Force would prefer a functional component commander to assigning forces of one Service to another. Moreover, having to obtain support from another Service would be "less flexible, [result in] less timely spare parts support, and [be] less adaptable to meet Expeditionary Aerospace Force support requirements" (Starr, 2001: 5, 7).

Also, the Air Force does not support the option of a stand-alone agency acting as the theater logistics manager. This is seen as an additional layer of bureaucracy between the warfighter and the depot. There is concern about all types of supply, including single-Service supplies, being managed by an agency since this may interfere with the Services' Title 10 logistic responsibilities (Starr, 2001: 5-6).

The Air Force wishes to protect Service logistics. The Expeditionary Aerospace Force (EAF) must be adaptive and responsive for worldwide use, and the Air Force feels this can only be guaranteed by the "tailored and integrated logistics capability that the Service is best suited to provide" (Starr, 2001: 7).

Conclusions from the Air Force Stance on JTLM.

In short, the Air Force does not want to jeopardize Service logistics by relegating logistics support to another Service or agency. They would prefer a JTLME born from the current J-4 staff, which reports to the CINC, to handle joint theater logistics. The Air Force's concerns about additional layers of bureaucracy, loss of flexibility and responsiveness seem to stem from fears about loss of control. Moreover, there is an unmistakable priority put upon minimizing manpower authorization impact. Finally, three points need to be emphasized from the Air Force's position. One, the Air Force has no problem with its forces working under a functional component commander. Two, the Air Force supports a theater focus on logistics, but wishes to maintain Service logistics. The proposed JTLME would simply coordinate Service logistics with the Services maintaining ADCON over its logistics. Therefore, the Air Force does not want a logistics commander administering Air Force logistics. The Air Force feels that only the Service can provide the integrated logistics needed by the EAF.

The last two points show the problem with parochialism: the philosophies that theater logistics is fine, as long as it doesn't impact how the Service feels it needs to be supported; or, that only the Service has the ability to adequately support itself. In the joint world, the Services must think outside of their Service. No matter what opinion is held, there is no such thing as Service logistics pipelines that are responsive to the

individual Service. When the U.S. responds to a contingency, it goes as a team, and that means that logistics support from deployment, through sustainment, to redeployment, must come via a single pipeline. The Services will have to compete for space within a limited logistics system. The Air Force as well as the other Services must be willing to allow their logistics to be prioritized by and according to the CINC's plans. Also, the Services must admit that other units, Services, or agencies can be trusted to logistically support them. The key is training these managing organizations in how to handle joint logistics.

With a JFLOGCC possessing full command authority and a fully manned an trained component, the Air Force can be supported as well as it supports itself. All a Service loses is its direct connection with its CONUS suppliers. A benefit of the Service allowing its logistics requests to be coordinated and prioritized with the other Services is one of controlled prioritization. In illustration, when every Service requests what they want unilaterally the limited transportation system quickly becomes inundated resulting in equipment and personnel piling up. Often these supplies have similar priorities and their shipment begins to resemble a random distribution. Someone has to prioritize their movement, and that could be TRANSCOM, but may also be the worker in the aerial port at the APOE. Do the Services really want someone outside the theater at the tactical level deciding in what order the stockpiled supplies are to be moved? If the JFLOGCC can correctly prioritize requests from the theater, the aerial porter will not have to pick and choose. In this case, the Services can argue their needs based on combat effects through the functional combatant component to the logistics commander. These combat effects should be in line with the CINC's plans, and receive prioritization accordingly.

More importantly, when supplies begin to stack up at the aerial ports, those workers have a single organization to call for guidance on which to send out first, the JFLOGCC.

Mobility Air Forces Today

The MAF today are organized to simultaneously support theater and global responsibilities. Therefore relatively few assets are given to the theater and most are retained by TRANSCOM. This next section discusses the command and control and the presentation of mobility air forces.

Command and Control.

The MAF currently fall under the Commander Air Force forces (COMAFFOR), the designated Air Force Component Commander. He normally exercises operational control over all U.S. Air Force forces in a designated area of responsibility. The coordinating authority for air mobility assets is the Director of Mobility Forces (DM4). The DM4 is embedded within the air component and reports to the JFACC, or COMAFFOR if the COMAFFOR is not the JFACC. The DM4 integrates theater mobility forces with intertheater forces. Current doctrine states that the DM4 coordinates air mobility with all commands and agencies internal and external to the theater for the COMAFFOR or JFACC. He should be a senior officer familiar with the region and co-located with the Air Operations Center (AOC). DM4 responsibilities include:

1) Integration of TRANSCOM assets into theater.

2) Coordination of the tasking of TRANSCOM assets attached to the CINC for intertheater support—any MAF forces under TACON to the CINC would be tasked through the DM4.

3) Direct the tasking of intratheater air mobility forces. These are the MAF directly assigned to the theater.

4) Coordinate to ensure MAF operations are fully integrated into the air operations plan and deconflicted. All flying activity must be deconflicted to limit the risks of aircraft collision and airfield and flying corridor saturation.

5) Coordinate with Air Mobility Command's (AMC) Tanker Airlift Control Center (TACC) via the Air Mobility Element (AME) to ensure most effective use of MAF resources. The TACC is the nerve center for AMC that executes TRANSCOM air assets globally. The AME is the direct liaison with the TACC and coordinates intertheater movement (AFDD 2-6, 1999: 20-21).

6) Command and control of MAF forces occurs through the Air Mobility Division (AMD) that is a part of the Air Operations Center. The AMD must coordinate with the CINC's movement authority and TACC to "derive apportionment guidance, compute allocation, and collect requirements." The DM4 directs the AMD (AFDD 2-6, 1999: 21).

In summary, the DM4 coordinates external air mobility support and directs internal air mobility assets via the AMD which coordinates with the Joint Movement Center (JMC) and TACC. This crucial part of the theater's logistical capability resides within the air component under the JFACC and is embedded within the Air Force chain of command.

Forces .

The MAF are comprised of airlift, aerial refueling and air mobility support forces. In a contingency, some MAF fall under the operational control (OPCON) of the JTF commander, but because the MAF operate globally, and must be responsive to needs

outside the theater, some MAF do not transfer OPCON to the theater (AFDD 2-6, 1999: 20). Those forces not transferring OPCON would be strategic airlift aircraft and refueling aircraft supporting them, as well as mobility support forces in theater that are serving a global or intertheater role. Sometimes strategic intertheater mobility aircraft may be made available to the theater on a limited basis. In these cases, TACON of these assets would be delegated to the JFC commander and executed through the COMAFFOR and the DM4.

Is Air Mobility Airpower or Logistics?

The MAF currently reside within the air component because they are considered airpower, but is this the correct place for the MAF to be? Does placing them under the JFACC suboptimize their effectiveness, thereby hindering the theater as a whole? Can the MAF be looked at as logistics forces and taken out from under the JFACC and placed under the JFLOGCC?

Air mobility undoubtedly is airpower. Airpower brings maneuver and speed not found anywhere else, but these characteristics enable airpower to play a significant logistics role. In a contingency, mobility airpower plays two basic roles. One, it is a force multiplier in that air mobility with aerial refueling enables force packages the range and duration needed to complete their missions. Airlift allows for direct delivery of supplies or personnel where and when its needed. Second, air mobility is crucial to the theater's logistics. As discussed above, the expeditionary nature of American armed forces necessitates rapid deployment over vast distances, and that can only be met by air mobility. In the early stages of a contingency, airpower is the only way to quickly deploy forces, and of all the Services, the quickest way to get combat power in theater is

with Air Force combat forces. Therefore, the early stages of most conflicts will be dominated by the Air Force, primarily by the air mobility part.

As the contingency matures and heavy sealift begins to take over the bulk of the deployment and sustainment roles, air mobility will begin to shift its focus. A major part of the aerial refueling assets will be moved from air bridge operations to combat support missions, and some airlift assets may be assigned combat roles, like those of airborne operations. The majority of the strategic airlift will remain outside of the theater's control, but will maintain a continuous flow of high priority supplies. This shift from a logistics focus to combat focus is a unique MAF quality. Not only can the shift happen quickly and efficiently, but MAF do not need to be labeled either combat or logistics—both are inherent in its capabilities and both are performed as the theater needs. Therefore, air mobility is airpower, but it cannot be separated from its logistics role. Because logistics enables all of the components' combat ability, the logistics role supersedes the needs of the air component and should take on a larger, theater focus. Just like air power can operate at all levels of war, the MAF can operate as a combat force or a logistics force.

Since logistics is of immediate importance, the MAF should operate as a logistics force and be apportioned to combat as needed. In order to coordinate this dual role efficiently, a new command structure is needed to allow flexibility.

New Command Relations for Air Mobility Logistics Forces

With a JFLOGCC, the command relations of the MAF may change. The leadership would see both changes in its roles and how it fits into the theater command

structure. Similarly, the MAF on the ground would see changes in their command relationships, as would many Army, Navy and Marine logistics units.

Commander, Mobility Air Forces.

The leader of the MAF in theater today is the DM4, though he only serves as a director and integrator. With the advent of a JFLOGCC, the DM4 becomes the Commander, Mobility Air Forces (CMAF), and he would report to the JFLOGCC. His roles would entail commanding all assigned MAF in the theater, command of all aerial ports of debarkation and associated marshalling yards, liaison with the Joint Movement Center, liaison with the JFACC, and liaison with TRANSCOM. His command of theater assigned air mobility forces would include mobility support Tanker/Airlift Control Element (TALCE) units. He would have OPCON of all APODs, and therefore, TACON of all units supporting airfield port operations. These would include the Army's Cargo Transfer Company and other units that perform the A/DACG function, security and military police, and other support units on the airfield. OPCON of APODs would also entail the responsibility for identifying APODs for use in both deliberate and crisis planning. Additional forces could come from beyond the Air Force. The CMAF would receive TACON of Army, Marine and Navy fixed-winged and rotary-winged aircraft made available for common-user lift. These additional forces would be released when they are not needed at the tactical level and could be used operationally. The usefulness of helicopters may be questionable at the operational level, but they may be used as a type of express package delivery for highly critical supplies as they build up at the S/APODs. The CMAF liaison with the JMC integrates airlift into all modes of theater transportation at the joint level. The liaison with the JFACC maintains the integration of

all flying activity into the air operations plan. Finally, the liaison with TRANSCOM moves the function of requesting intertheater support from within the Air Force Component up to the joint level and inside the logistics component.

Air Mobility Division Director.

An Air Mobility Division Director (AMDD) could replace the traditional DM4. Though the structure of the AOC itself may change, that is beyond the scope of this paper. The CMAF would exercise OPCON of the AMDD and all MAF within the AOC, though operationally, they would report to the AOC director and the JFACC. As members of the logistics component, the mission of the AMDD and the other MAF within the AOC would be to balance the combat need for MAF assets with the logistical necessity of the theater, and to command and control the execution of all MAF missions.

Ramifications.

Operationally, not much would change. In the beginning phases of a conflict, the focus has been and will remain deployment of forces. That focus is a logistics component core competency. Once operations move more and more into combat and the focus of the air component shifts to combat and sustainment, the apportionment of forces shifts accordingly. Tanker aircraft that were dedicated to the air bridge are now dedicated to combat support sorties. Airlift aircraft that hauled supplies around the theater may now be apportioned to drop airborne troops. Their availability and tasking remains unchanged, and the Air Tasking Order (ATO) process remains the same with all mobility aircraft, Army, Navy and Air Force, appearing in the ATO. What does change is the ease with which forces can be apportioned. Tankers that are dedicated to air bridge

operations and are left standing idle at any time may be easily incorporated into a combat air refueling mission.

Aerial Ports of Debarkation.

A unique ramification of a logistics component is the grouping of once diverse logistics personnel from various Services into one component. The greatest example of this can be seen at the aerial port of debarkation. Currently, the MAF forces in charge of unloading the aircraft report through the AME to the DM4, and the Army troops that help unload the aircraft and organize the equipment for the gaining unit report through the Army logistics channels to the Army Component Commander. Two chains of command currently exist within the same aerial port. Under this proposal, with all logistics troops falling under one commander and the APODs reporting to the CMAF, these units now work for the same boss—one airfield, one commander. This allows for the supremacy of purpose at the airfield and limits ancillary use, such as billeting of combat forces that would hinder operations. Furthermore, conflict over use of material handling equipment would be at a minimum since a central authority would direct its use and arbitrate any disputes between aircraft unloading and equipment staging. Finally, with the CMAF as part of the JFLOGCC, coordination to keep supplies from building up at the APODs and staging area will help to decrease the vulnerability that our fat logistics bases provides to the enemy.

Summary

This chapter presented the official Air Force stance on JTLM and showed that its concerns about letting another agency handle logistics may be allayed by a logistics component. Furthermore, such a component may potentially benefit the Services.

Additionally, a redefined MAF with a designated commander gaining control of APODs as well as other Service mobility air forces, would greatly compliment the logistics component and be a major portion of it. In short, this paper proposes that the current Director of Mobility Forces be made the Commander, Mobility Air Forces, and that a new position, the Air Mobility Division Director take over the operation of the AMD in the Air Operations Center. The MAF should become a part of the logistics component, remain executed with all other air forces via the AOC, and apportioned as necessary to combat operations.

V. Conclusion

As a child, I used to spend countless hours playing board wargames with my older brother, and one of the earliest lessons I learned was the importance of lines of communication and lines of supply. The quickest way to have your combat forces eliminated was to have them isolated and cut off from retreat. Though victory in these operational-level games depended mainly upon reaching strategic objectives, the reality of supply, reinforcements, and mobility dictated the outcome. The harsh lessons my brother so eloquently demonstrated to me have also been the lessons of history. Combat power stems from logistics, for without the troops, their equipment, and the ability to sustain both, there is no power. The fact that the U.S. *will* fight with very long lines of supply that will probably stretch back to the homeland, increases the criticality of logistics to a level that has rarely been seen in history—Napoleon at the gates of Moscow comes to mind as just such an example.

Just as Napoleon succumbed to the Russian winter because he could not support his army far from home, the U.S. armed forces may suffer if its logistics cannot be maximized. Today's theater logistics suffers from lack of control, theater focus and Service competition. Inundated transportation systems with backlogged supplies of identical priority and inadequate information systems that rarely allow Services to access each other's information combine to limit the effectiveness of control. Moreover, in order to have control, the CINC's ability to affect logistical support both from without and within his theater depends upon the logistics system being responsive to his priorities. Today, the system is not as responsive as it could be. Services try their best to

support their forces, but they do so with a Service focus. Additionally, the Services' support tends to compete for space within the finite transportation system. Priority inflation compounds the problem by making most of the requests the same, high priority, thereby undermining any plan for orderly movement. Additionally, when logistics does take on a theater role, the organizations used are often ad hoc and must overcome the lack of training and doctrinal guidance. Lastly, Service competition moves beyond the realm of requests and transportation and often enters the realm of mistrust. The competition for congressional funding and the drive to remain critical to military capabilities leads to an atmosphere of "kill or be killed." As each Service strives for the largest piece of the funding pie, they continuously work on improving themselves. The pride of being able to "go it alone" adds to the unwillingness of one Service trusting another to provide support. In the end, today's logistics system is one that works, but lacks centralized control. The CINC cannot fully communicate the theater's priorities and the Services instinctively fight against any subordination of their responsibilities.

The main goal of the Joint Forces Logistics Component is to bring control to the CINC. Centralized control and decentralized execution should be the creed of logisticians, including those of the mobility air forces. The JFLOGCC follows the timeless principles of war, formally raises logistics to equal importance with combatant commands, and centralizes control. This control entails theater prioritization, centralized contracting, TPFDD validation and discipline, unity of purpose at the ports of debarkation and reducing duplicated effort.

Theater logistics in general brings these benefits, but a logistics component can be the best way to implement it. Keeping the goal of control in mind, the JFLOGCC places

a *commander* in charge of the organization, one on par with the other functional commanders. More importantly, the commander and the organization have a truly joint heredity and commission. By not being a Service organization, staffed and trained within the Service stovepipe, the JFLOGCC can look beyond Service loyalties to the theater as a whole. Finally, by following the example of the JFACC, the logistics component alleviates the Air Force's largest concern, additional demands on manpower. The headquarters element would be comprised of existing J-4, TSC and executive agent staffs already in theater. Their peacetime jobs would reflect their wartime responsibilities. Basically, a small cadre, trained and indoctrinated in the joint responsibilities would be rostered in battle to man the JFLOGCC. Already existing logistics forces would implement logistics execution. Therefore, to better control and centralize the logistics function with minimal demands on existing manpower, the JFLOGCC is the best option.

To fall in line with centralized control, all operational logistics functions should fall under the new logistics component. Elements of the J-4 staff that man the joint boards, liaison with outside logistics agencies and commands would combine with TSC and CMAF staffs to command and control the component. Operational level units that coordinate road movement, port operations, and distribution should all be controlled by the component.

To follow the theme of centralized control, the mobility air forces should reorganize. By elevating the current Director of Air Mobility Forces to the status of Commander, Mobility Air Forces, the crucial piece of airlift no longer resides within a single Service's chain of command. All mobility aircraft, of all Services, falls under one commander that can fully execute logistics missions with a theater focus. Moreover, the

flexibility to rapidly move mobility air forces from logistics to combat support missions is enhanced by the CMAF.

This research has shown that U.S. law and doctrine allow for the formation of a logistics functional component command. Current leadership and the lessons of history support the concept, and current CINCs are planning to use some form of theater logistics, though no formal, doctrinal way to do that exists. To provide this doctrinal guidance, the JFLOGCC concept should be codified.

Codification

Why codify the logistics component when a CINC has directive authority for logistics in the first place, and can design his theater as he see fit? The problem is twofold. First, militaries in general and the U.S. military specifically has a trouble with giving logistics the priorities it deserves. A doctrinal logistics commander would help to keep logistics from being relegated to second place, and codification demonstrates commitment to logistics. Next, organizations must be staffed, trained and exercised as a team to operate optimally in combat. Ad hoc organizations work because of the quality of its people overcoming obstacles to force success. On the other hand, planned and trained organizations typically have overcome many of the same obstacles before employment. More importantly, this doctrinal organization may provide the drive to fund continued integration and development of information systems that can truly capitalize on the strengths of the logistics component.

Not a Panacea

Clearly, a JFLOGCC can bring great benefits to the theater, but it is not a panacea. The fully mature theaters of Korea and Europe have well thought out lines of

supply and clearly understood executive agent responsibilities. Instituting an overhaul of a system that has had years to work out detailed problems would probably hurt the theater. The places that should adopt the JFLOGCC are new theaters where the U.S. does not have a permanent infrastructure and strong host-nation ties. Where logistics must be completely brought in with the deploying force, a JFLOGCC could greatly benefit the CINC. In austere locations, alternatives to U.S. transportation and support can be expected to be minimal, and every ounce of available lift must be used to follow the CINC's plan. A JFLOGCC can do that. A logistics component can bring order to the initial chaos of the first days of a contingency by being the theater's touchstone concerning support requests and prioritization. Therefore, to avoid forcing changes where none are needed, doctrine should allow a JFLOGCC as an option where clear theater logistics relationships have been established.

Bottom line

Regardless of the form that theater logistics may take, component or otherwise, there must be a theater focus to logistics. There should be no separate and individual Service logistics pipelines; these entail redundancy and end in competition for limited transportation. Services should be willing to subordinate themselves to the theater in times of crisis yet maintain their Title 10 responsibilities to procure, train, equip and sustain their forces in peace. Ultimately, they will have to allow a theater authority to determine who gets the lion's share of logistical support. Next, the theater must present a single priority list to the world. To prevent agencies outside of the theater having to determine which cargo of identical priority should be shipped on their own, the theater should rack and stack every request for the world. Then there would be no second-

guessing about what the theater and its commander wishes; a doctrinal logistics component can do this. When logistics is doctrinally and physically on equal footing with the other combatant components it can be an arbiter to enforce the wishes of the CINC. A doctrinal component would have the manning, training and responsibility to fully provide the forces that enable combat power. Furthermore, a logistics component enjoys unity of command by uniting the various theater logistics organizations under a single commander. Units such as the TSC and an invigorated MAF should be part of the logistics component. Specifically, the mobility air forces play a dual role for the theater—both logistics and combat—so care should be given to the correct apportionment between the two.

Finally, all these pieces come together in an organization that has a joint focus during peace and war. An organization that has doctrine to empower it, training to enable it and forces to execute logistics not just for the Services, but for the theater. Bottom line, the CINC must be able to rapidly enable combat power wherever the situation calls for it. To this end, he must have a logistics organization with a theater focus that can rapidly move logistics support. The logistics component and invigorated and empowered mobility air forces allow this. Therefore, a logistics component can benefit a CINC's campaign. Q.E.D.

Recommendations for Future Research

Quantitative Research.

This study approached the task of identifying ways to improve theater logistics from a purely qualitative approach. Future research should look at the proposed solution of a logistics component quantitatively. A researcher could use computer-based

simulation, computer-aided wargaming, adjudicated wargaming, or large-scale exercises. The goal would be to determine if *theater*-level logistics would benefit from a logistics component. One could look at how decisions of the JTF commander would be affected by having a full-fledged logistics component commander at the table during councils of war, and how component and Service priorities would be determined and adjudicated during a crisis.

Multiple JTFs in a Theater.

Just as the Services compete for support, multiple JTFs in a theater compete for support. An in depth study of the effects of multiple JTFs on the theater's logistics should be undertaken. Some suggested investigative questions are "if the original JTF spawns additional JTFs, can their logistics be subordinated to the major JTF?" "Does this new line of logistics command and control usurp the JTF commander's authority and responsiveness to the CINC by forcing him to go to another JTF commander for logistics support?" "Would an overarching JFLOGCC have to be established to act as arbiter among the various JTFs to present a theater plan to the world?"

New Priority System.

A major benefit of the JFLOGCC is being able to effectively portray the theater's priorities for personnel and equipment to the logistics agencies outside the theater. History has shown that priority creep occurs, where transportation users consistently increase the priority of their cargo to the point where most cargo has the same, highest priority. In DESERT STORM, this problem was dealt with by instituting a new level of priority, 9AU. It was designed to meet CENTCOM's "war stopper requirements," but it too experienced priority creep to the point where pallets of sandbags and duplicating

paper also received this ultimate, high priority (Matthews and Holt, 1992: 59-60). Somehow, the U.S. priority system must be responsive to the theater. A JFLOGCC can "run herd" and enforce a realistic list of priorities for the theater, but if the theater must compete with other requests of equal, though less credible priority, national policy may be undermined. Research should be conducted into revamping the priority system. Some investigative questions may be, "can a level of priorities be dedicated just to the CINCs?" "What stratification could occur within this new CINC-priority level?" "Should the CINC's priorities be the highest, or should there be mitigating circumstances, like differences during war and peace?" "How does presidential lift compare to CINC priorities?" And, "who should arbitrate competing requests of the same priority?"

Appendix A: CINC and Staff Interview Script

1. "Is (CENTCOM, PACOM, EUCOM, SOUTHCOM, USFK, JFCOMM) planning on using a joint theater logistics command/commander? Why?"

2. "If a joint command is planned for, how will it be organized? What would be the role of the J-4 in the new organization? Do you plan to use dominant user, the Army's Theater Support Command (TSC) concept, or a purely joint organization? Will there be a Joint Movement Center? Will the DIRMOBFOR be included/liaison with?"

3. "What will be the extent of the organizations authority? Will it have control over common-user assets? Will it control tactical airlift? Will it own all classes of supply (like T-shirts and HUMVEE tires)?"

4. "Will the organization exercise authority over POD/APODs?"

5. "What are the expected benefits? (Redundancy, contracting, moving PREPO, TPFDD visibility and discipline, establishing priorities at the POD/APODs, unity of command, full theater visibility)"

6. "What are the expected costs? (Parochialism, joint manpower, layers of bureaucracy, layer between combat support and the warfighter, slowness in reaction, loss of flexibility, loss of adaptability, training)"

7. "Do you plan to wargame the concept? Do you plan to train the staff? How?"

8. "If the Army's TSC serves as the nucleus, how will you overcome the Army's high dependence upon reservists and guardsmen during the early stages of the conflict while awaiting reserve call-up? Would any joint billets be created full time for planning and continuity purposes?"

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14. ABSTRACT

Though joint operations have been the hallmark of U.S. military doctrine for many years, a systematic study of joint logistics and the role of the U.S. Air Force has not been undertaken. This neglect has allowed a significant question to remain unanswered, specifically, "Would the theater Commander-in-Chief (CINC) benefit from a codified, doctrinally supported theater logistics commander?" Moreover, no study has looked at this question from the unique perspective of the mobility air forces (MAF), and their role in joint theater leadership. This study grappled with the question of joint theater logistics command and control, especially from the MAF point of view. It looked at whether there can be a logistics component, if it could bring any benefit to the CINC, and finally, how the mobility air forces would be effected.

A logistics component can exist: U.S. law allows a logistics component and doctrine supports its creation as an option for the CINC, OPERATIONS DESERT STORM, RESTORE HOPE and JOINT ENDEA VOR show that the U.S. has successfully used a theater logistics organization and that the concept works. These same examples also show how an ad hoc organization has serious shortfalls in the support it can provide. Current leadership is pursuing theater logistics implementation as shown by joint vision statements and the logistics plans of the various CINCs.

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